

PARTS MANUAL



***WHITEMAN* SERIES**
MODEL HHXD5
RIDE-ON POWER TROWEL
(B & S VANGUARD DM950DT DIESEL ENGINE)

Revision #3 (07/24/13)

To find the latest revision of this
publication, visit our website at:
www.multiquip.com



THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

PN: 23466

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HHXD5 Ride-On Trowel

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NOTICE

Part numbers are subject to change without notice.

PARTS ORDERING PROCEDURES

Ordering parts has never been easier! Choose from three easy options:

Effective:
January 1st, 2006

www.multiquip.com



Order via Internet (Dealers Only):

Order parts on-line using Multiquip's SmartEquip website!

- View Parts Diagrams
- Order Parts
- Print Specification Information



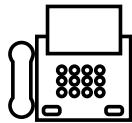
If you have an MQ Account, to obtain a Username and Password, E-mail us at: parts@multiquip.com.

To obtain an MQ Account, contact your District Sales Manager for more information.

Goto www.multiquip.com and click on **Order Parts** to log in and save!

Use the **internet** and qualify for a **5% Discount** on *Standard orders* for all orders which include complete part numbers.*

Note: Discounts Are Subject To Change



Order via Fax (Dealers Only):

All customers are welcome to order parts via Fax.

Domestic (US) Customers dial:
1-800-6-PARTS-7 (800-672-7877)

Fax your order in and qualify for a **2% Discount** on *Standard orders* for all orders which include complete part numbers.*

Note: Discounts Are Subject To Change



Order via Phone: Domestic (US) Dealers Call:
1-800-427-1244

Non-Dealer Customers:

Contact your local Multiquip Dealer for parts or call 800-427-1244 for help in locating a dealer near you.



International Customers should contact their local Multiquip Representatives for Parts Ordering information.

When ordering parts, please supply:

- | | |
|---|--|
| <input type="checkbox"/> Dealer Account Number | <input type="checkbox"/> Specify Preferred Method of Shipment: |
| <input type="checkbox"/> Dealer Name and Address | <input checked="" type="checkbox"/> UPS/Fed Ex <input checked="" type="checkbox"/> DHL |
| <input type="checkbox"/> Shipping Address (if different than billing address) | <input type="checkbox"/> Priority One <input checked="" type="checkbox"/> Truck |
| <input type="checkbox"/> Return Fax Number | <input type="checkbox"/> Ground |
| <input type="checkbox"/> Applicable Model Number | <input type="checkbox"/> Next Day |
| <input type="checkbox"/> Quantity, Part Number and Description of Each Part | <input type="checkbox"/> Second/Third Day |

NOTICE

All orders are treated as *Standard Orders* and will ship the same day if received prior to 3PM PST.

WE ACCEPT ALL MAJOR CREDIT CARDS!



EXPLANATION OF CODE IN REMARKS COLUMN

The following section explains the different symbols and remarks used in the Parts section of this manual. Use the help numbers found on the back page of the manual if there are any questions.

NOTICE

The contents and part numbers listed in the parts section are subject to change **without notice**. Multiquip does not guarantee the availability of the parts listed.

SAMPLE PARTS LIST

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	12345	BOLT	1	INCLUDES ITEMS W/%
2%		WASHER, 1/4 IN.		NOT SOLD SEPARATELY
2%	12347	WASHER, 3/8 IN. ...	1	MQ-45T ONLY
3	12348	HOSE	A/R	MAKE LOCALLY
4	12349	BEARING	1	S/N 2345B AND ABOVE

NO. Column

Unique Symbols — All items with same unique symbol

(@, #, +, %, or >) in the number column belong to the same assembly or kit, which is indicated by a note in the “Remarks” column.

Duplicate Item Numbers — Duplicate numbers indicate multiple part numbers, which are in effect for the same general item, such as different size saw blade guards in use or a part that has been updated on newer versions of the same machine.

NOTICE

When ordering a part that has more than one item number listed, check the remarks column for help in determining the proper part to order.

PART NO. Column

Numbers Used — Part numbers can be indicated by a number, a blank entry, or TBD.

TBD (To Be Determined) is generally used to show a part that has not been assigned a formal part number at the time of publication.

A blank entry generally indicates that the item is not sold separately or is not sold by Multiquip. Other entries will be clarified in the “Remarks” Column.

QTY. Column

Numbers Used — Item quantity can be indicated by a number, a blank entry, or A/R.

A/R (As Required) is generally used for hoses or other parts that are sold in bulk and cut to length.

A blank entry generally indicates that the item is not sold separately. Other entries will be clarified in the “Remarks” Column.

REMARKS Column

Some of the most common notes found in the “Remarks” Column are listed below. Other additional notes needed to describe the item can also be shown.

Assembly/Kit — All items on the parts list with the same unique symbol will be included when this item is purchased.

Indicated by:

“INCLUDES ITEMS W/(unique symbol)”

Serial Number Break — Used to list an effective serial number range where a particular part is used.

Indicated by:

“S/N XXXXX AND BELOW”

“S/N XXXX AND ABOVE”

“S/N XXXX TO S/N XXX”

Specific Model Number Use — Indicates that the part is used only with the specific model number or model number variant listed. It can also be used to show a part is NOT used on a specific model or model number variant.

Indicated by:

“XXXXX ONLY”

“NOT USED ON XXXX”

“Make/Obtain Locally” — Indicates that the part can be purchased at any hardware shop or made out of available items. Examples include battery cables, shims, and certain washers and nuts.

“Not Sold Separately” — Indicates that an item cannot be purchased as a separate item and is either part of an assembly/kit that can be purchased, or is not available for sale through Multiquip.

SUGGESTED SPARE PARTS

HHXD5 RIDE-ON TROWEL WITH B & S VANGUARD DM950BT DIESEL ENGINE

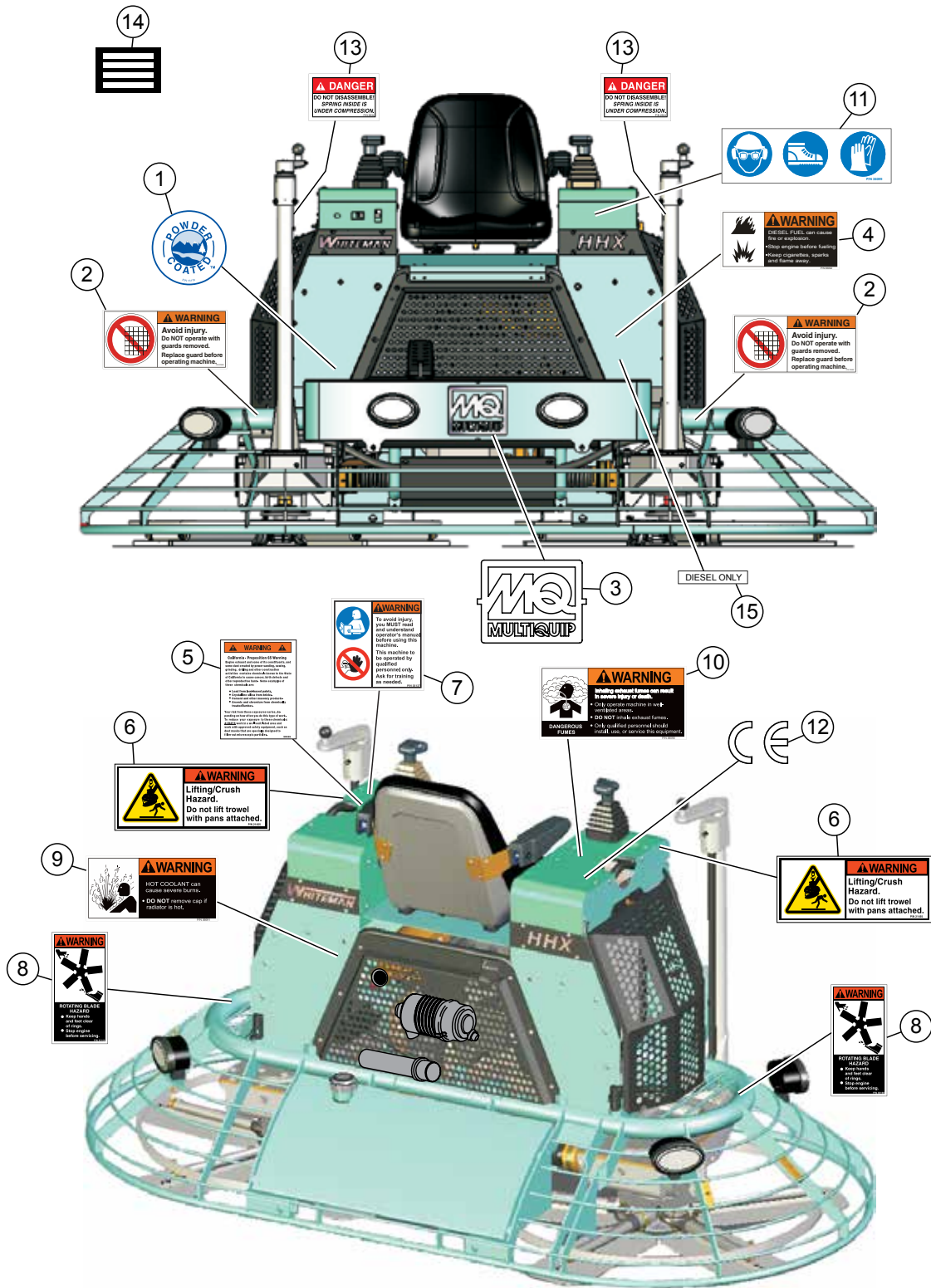
1 to 3 units

Qty.	P/N	Description
3	23284-100	FUSE, 10 AMP ATC/ATO
3	23284-300	FUSE, 30 AMP ATC/ATO
1	12017	RELAY,KILL # HELLA # 87411B
1	406000	ROCKER, LIGHT SWITCH, ON-OFF
1	20165	PALM HANDLE KIT, L/R HANDLES W/O BOOT
2	12548	PUMP, SPRAY, SHURFLO 100-000-21
1	1714	CABLE ASSY, 43.75
3	22347	LIGHT, HELLA 50W BOTTOM MOUNT #996361617
1	23152	CABLE, THROTTLE
2	2829	ARM, TROWEL HD EXTENDED
6	11039	BUSHING, TROWEL LARGE ARM
3	9111	SPRING, LS H ARM RETURN STD BOSS
3	2143	SPRING, RS H ARM RETURN STD BOSS
1	21208	SPIDER KIT, 5BLD HHN SERVICE KIT
2	20938	THRUST ASM, SERVICE HTH, HHN, HTO TROWELS
1	23262	CYLINDER, HYDRAULIC STEERING ASSY
1	23275-02	ELEMENT, 10 MICRON FILTER
2	820314	OIL FILTER
2	23014-12	FUEL FILTER
2	M113621	AIR CLEANER ELEMENT
1	22408	GAUGE, MULTI
2	821075	V-BELT, ENGINE
2	20138	BELT, CVT CLUTCH COMET #302609 DF
2	23365	BELT, CVT MULTI-CLUTCH
1	10958	SWITCH, IGNITION, HONDA/VANGUARD TWINS, W/KEYS
1	821135	SWITCH, OIL PRESSURE
1	23014-03	SWITCH, WATER TEMPERATURE
1	825064	THERMOSTAT
1	23312	HOSE, RADIATOR, UPPER
1	825133	HOSE, RADIATOR, LOWER

NOTICE

Part numbers on this Suggested Spare Parts list may supersede/replace the part numbers shown in the following parts lists.

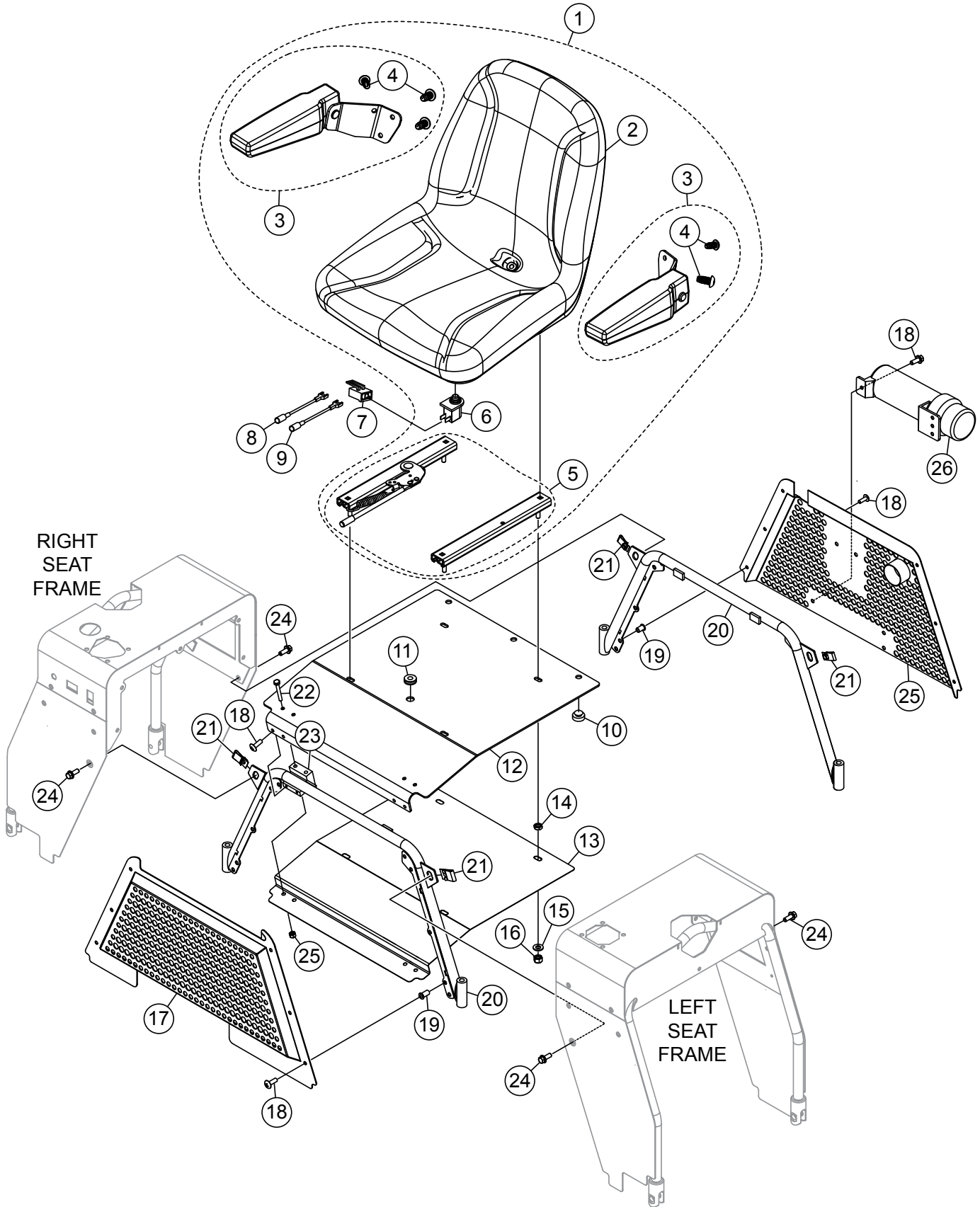
NAMEPLATE AND DECALS



NAMEPLATE AND DECALS

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	13118	DECAL, POWDER COATED	1	
2	21665	DECAL, REPLACE GUARDS 2.38" x 5.0"	2	
3	23235	BADGE, FOOT PLATFORM, HHX	1	
4	36092	DECAL, DIESEL FUEL 3.5 X 1.75	1	
5	20525	DECAL, WARNING, PROP 65	1	
6	21455	DECAL, LIFTING CRUSH HAZARD PANS	2	
7	35137	DECAL, READ MANUAL ASK FR TRAINING 2.75"	1	
8	35168	DECAL, ROTATING BLADE HAZARD 2.0 x 4.3	2	
9	36091	DECAL, HOT COOLANT 3.5 X 1.75 WRSDPU	1	
10	36090	DECAL, VENTILATION 2x4	1	
11	36099	DECAL, PROTECTIVE CLOTHING	1	
12	11092	DECAL, "CE"	1	
13	2634	DECAL, SPRING SAFETY	2	
14		DECAL, SERIAL PLATE.....	1CONTACT UNIT SALES
15	29157	DECAL, DIESEL ONLY, WHITE, MLT	1	

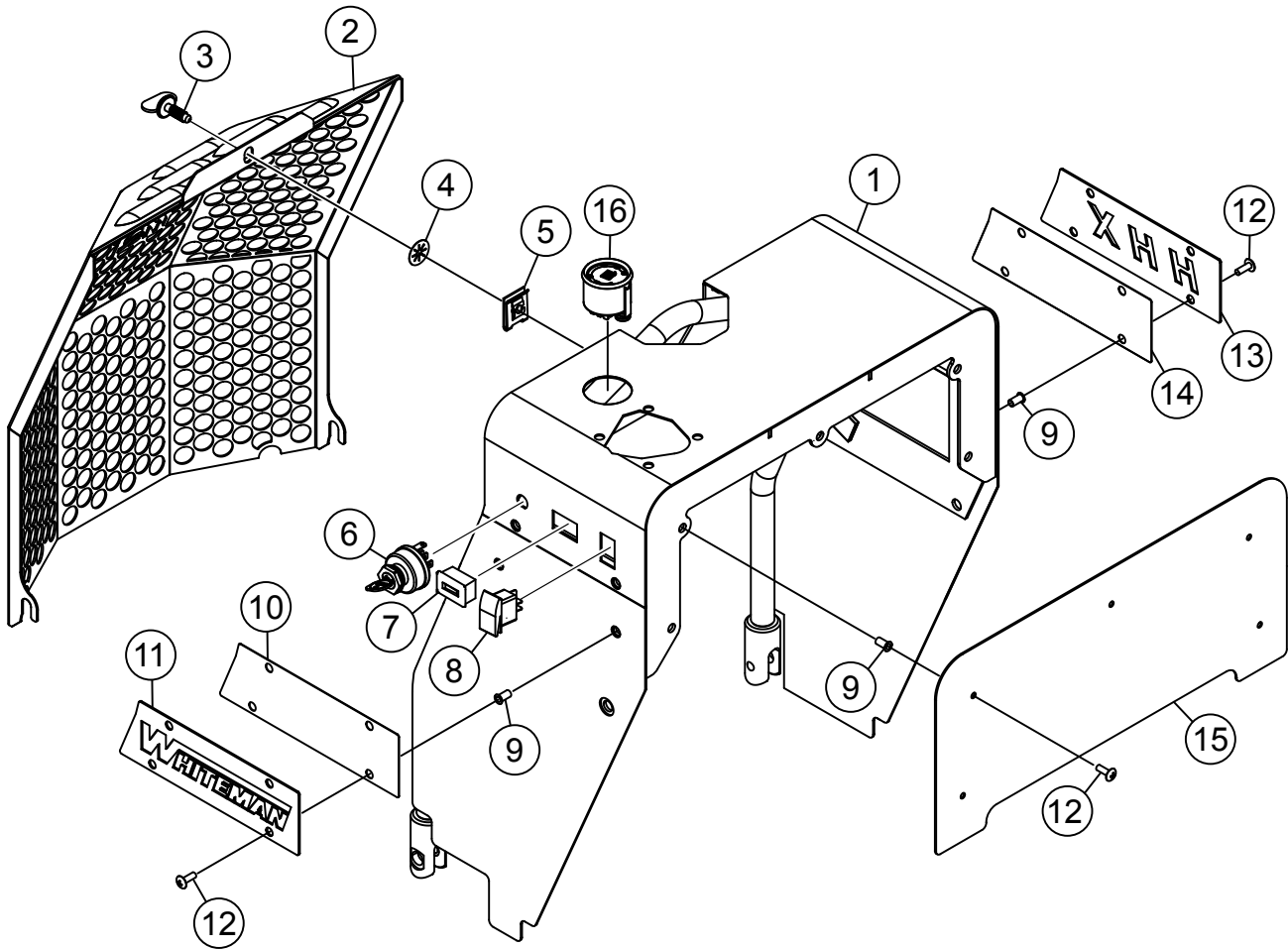
SEAT FRAME ASSY.



SEAT FRAME ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	21852	SEAT, MICHIGAN ADJUSTABLE W/ ARMS	1.....	INCLUDES ITEMS W/@
2@	21860	SEAT, MICHIGAN, BASIC	1	
3@	21868	ARM REST KIT, MICHIGAN V-2805 SEAT	2.....	INCLUDES ITEMS W/%
4@%	21869	SCREW, CAP 5/16-18 X 5/8"	6	
5@	21865	SEAT ADJUSTER KIT, MICHIGAN V-2805 SEAT	1	
6@	32980	SWITCH, KILL, DELTA SYSTEMS 6440-62	1	
7	21936	CONNECTOR BODY, 2 PIN MICHIGAN SEAT	1	
8	21924	WIRE ASSY, 16 GA RED X 11"	1	
9	21923	WIRE ASSY, 16 GA VIOLET/ORANGE X 12.5"	1	
10	21597	BUMPER STEM 1.0" D X .5 X .31	3	
11	19468	GROMMET, MINOR-PNZ 4004	1	
12	23080	PLATE, OPERATOR SEAT	1	
13	23281	SHIELD, SEAT PLATE	1	
14	0106	NUT, HEX JAM 5/16-18	4	
15	0300 B	WASHER, FLAT SAE 5/16	4	
16	5283	NUT, NYLOC 5/16-18	4	
17	23204	PANEL, FRONT	1	
18	12287	SCREW, THP 1/4-20 X 3/4 SS	19	
19	19266	NUT, BLIND 1/4-20 X 10GA	12	
20	23047	SUBFRAME, INNER SEAT	2	
21	23296	NUT, 3/8-16 J-TYPE RETAINER	4	
22	20909	SCREW, HHC 1/4-20 X 2	4	
23	20685	BLOCK, OPERATOR SEAT PIVOT	2	
24	22228	SCREW, HHF 3/8-16 X 1 GRD 8	4	
25	23126	PANEL, REAR ENGINE	1	
26	23297	MANUAL HOLDER, PICTOGRAPH SAE J232	1	

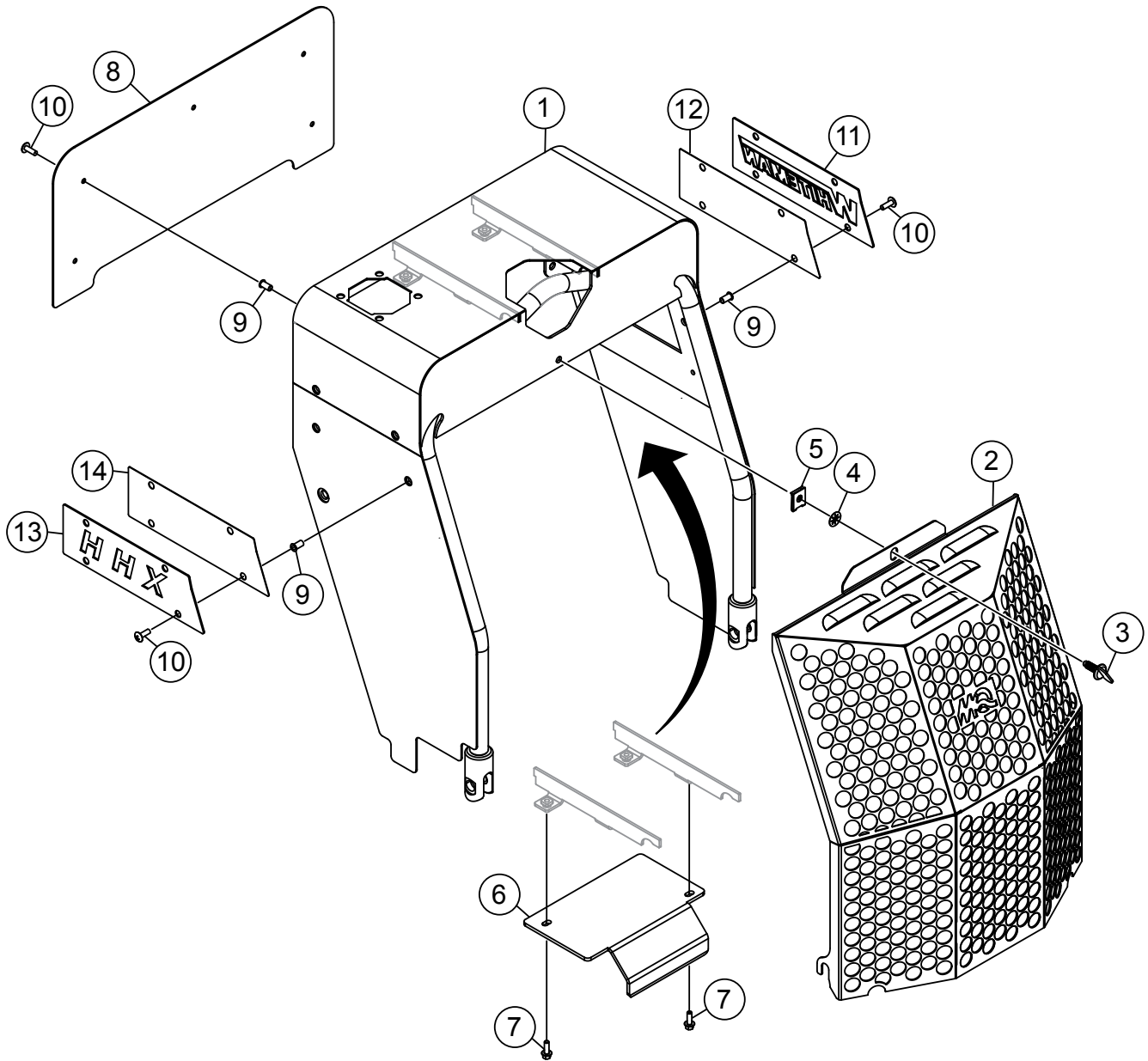
SEAT FRAME ASSY. (RIGHT)



SEAT FRAME ASSY. (RIGHT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23020	FRAME, SEAT, RIGHT	1	
2	23146	GUARD, GRILL	1	
3	21893	SCREW, FAST LEAD	1	
4	21986	WASHER,FAST LEAD- STAINLESS-SOUTHCO 17-6-1	1	
5	21894	CLIP, FAST LEAD-SOUTHCO 17-10027-17	1	
6	10958	SWITCH, IGN, HON/VAN TWINS, W/KEYS	1	
7	29640	HR METER, SENDEC RECT FLUS MT	1	
8	406000	ROCKER, LIGHT SWITCH, ON-OFF	1	
9	19266	NUT, BLIND 1/4-20 X 10GA	13	
10	23286	PANEL, TRIM BACKING B	1	
11	23175	PANEL, SIDE TRIM "WHITEMAN"	1	
12	12287	SCREW, THP 1/4-20 X 3/4 SS	13	
13	23132	PANEL, SIDE TRIM "HHX"	1	
14	23285	PANEL, TRIM BACKING A	1	
15	23130	PANEL, SIDE FRAME INTERIOR	1	
16	22408	GAUGE, MULTI	1	

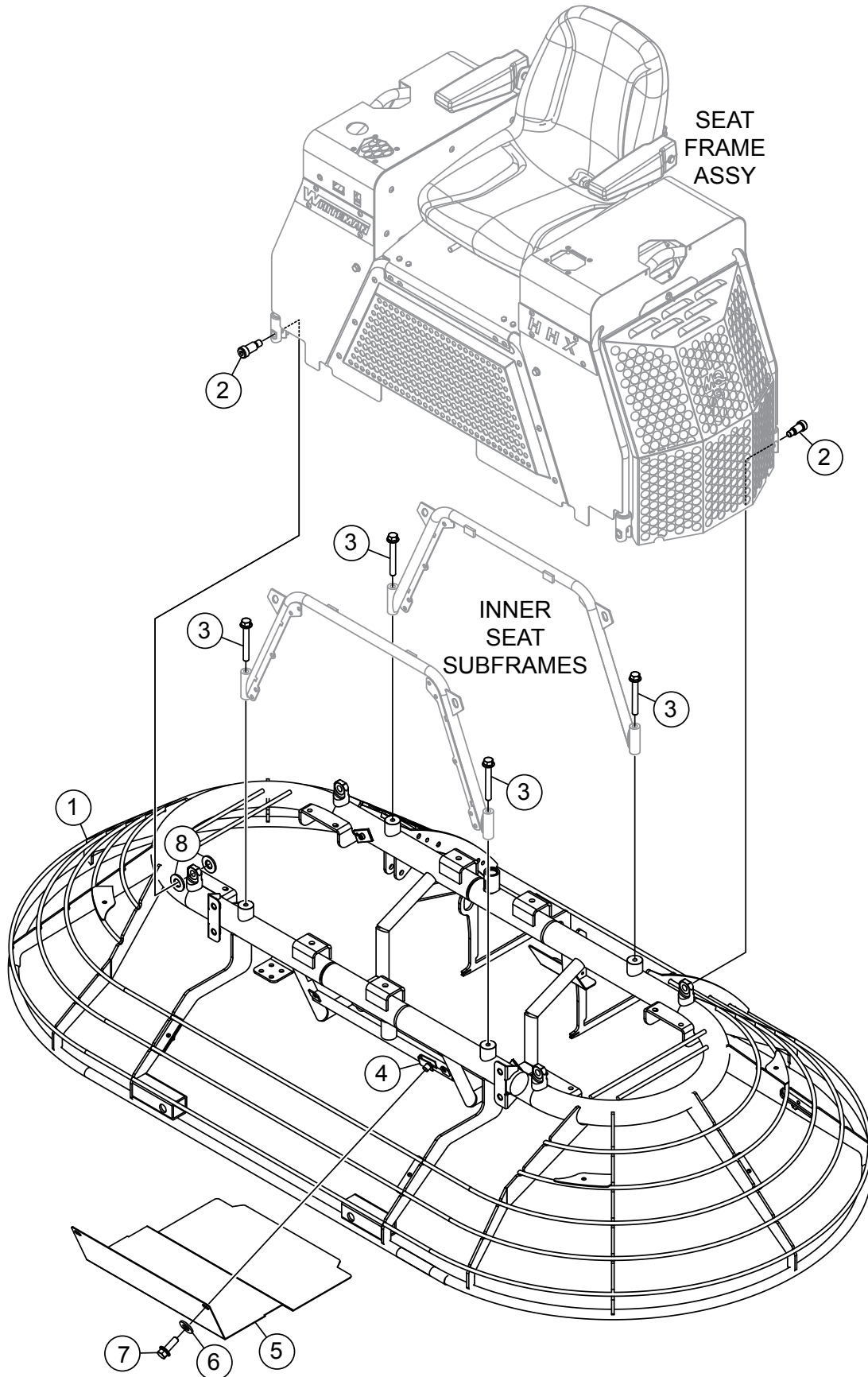
SEAT FRAME ASSY. (LEFT)



SEAT FRAME ASSY. (LEFT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23176	FRAME, SEAT LEFT	1	
2	23146	GUARD, GRILL	1	
3	21893	SCREW, FAST LEAD	1	
4	21986	WASHER,FAST LEAD- STAINLESS-SOUTHCO 17-6-1	1	
5	21894	CLIP, FAST LEAD-SOUTHCO 17-10027-17	1	
6	23117	PLATE, LT HOOK GUARD	1	
7	49048	SCREW, HHFS 1/4-20 X 3/4 GR5	2	
8	23130	PANEL, SIDE FRAME INTERIOR	1	
9	19266	NUT, BLIND 1/4-20 X 10GA	13	
10	12287	SCREW, THP 1/4-20 X 3/4 SS	13	
11	23175	PANEL, SIDE TRIM "WHITEMAN"	1	
12	23286	PANEL, TRIM BACKING B	1	
13	23132	PANEL, SIDE TRIM "HHX"	1	
14	23285	PANEL, TRIM BACKING A	1	

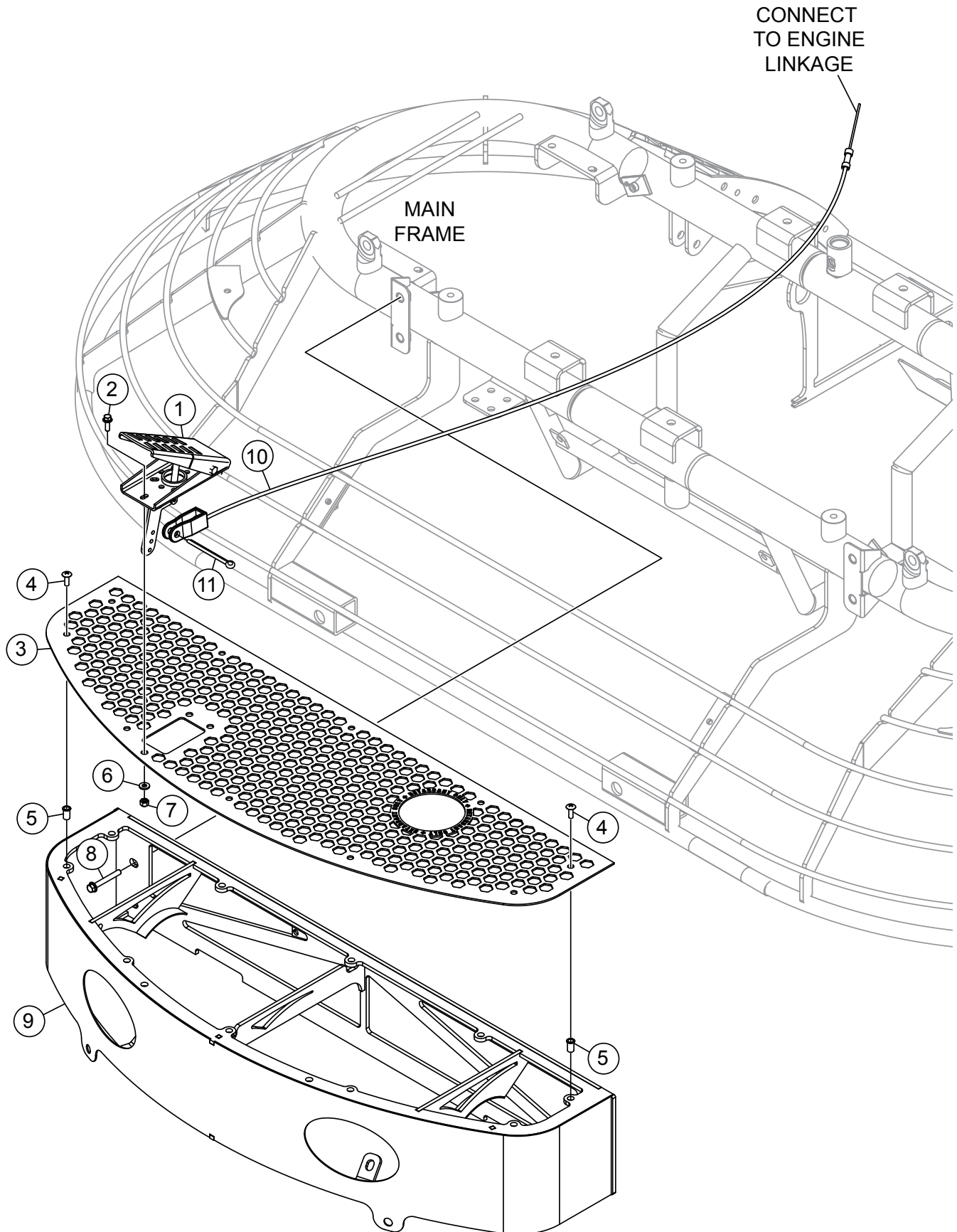
FRAME ASSY.



FRAME ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23000	FRAME, MAIN	1	
2	9162	SCREW, SHOULDER M16XM25 M12-1.75	4	
3	23288	SCREW, HHF M12-1.75 X 100 W/PATCH CL8.8	4	
4	11534	NUT, "U" TYPE, 1/4-20	2	
5	23253	GUARD, BELT SPLASH HHX	1	
6	3233	WASHER, FENDER, 1.50D X 3/8ID	2	
7	49048	SCREW, HHFS 1/4-20 x 3/4 GR5	2	
8	23303	BUSHING, SEAT FRAME	8	

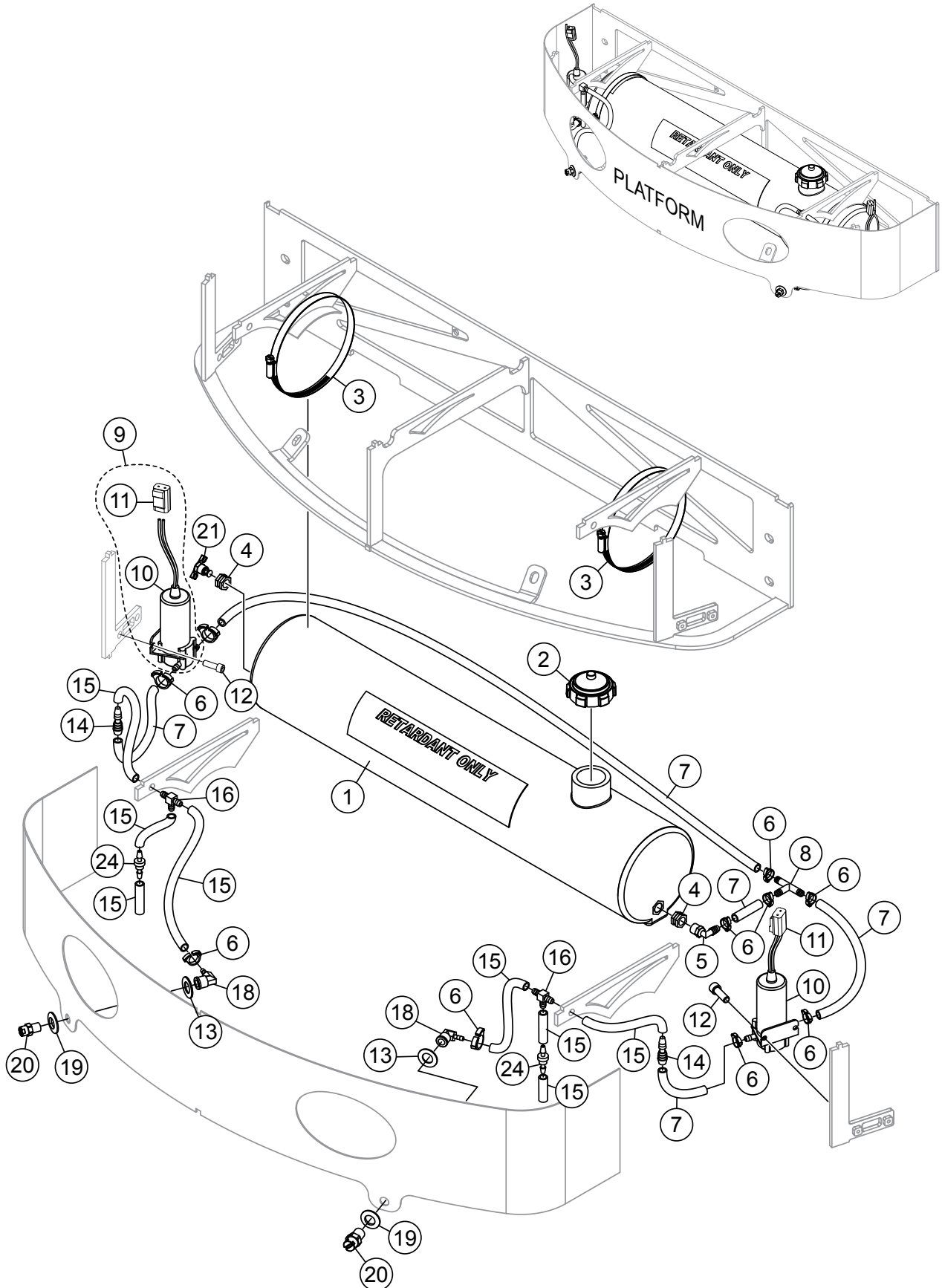
PLATFORM ASSY.



PLATFORM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	20694	PEDAL, HYDRAULIC PUMP	1	
2	49048	SCREW, HHFS 1/4-20 X 3/4 GR5	3	
3	23069	PLATE, FOOT PLATFORM TOP	1	
4	12287	SCREW, THP 1/4-20 X 3/4 SS	10	
5	29452	NUT, BLIND 1/4-20 X 3/16 ITR25-260SD	10	
6	0948	WASHER, FLAT SAE 1/4	3	
7	10024	NUT, NYLOC 1/4-20	3	
8	23305	SCREW, HHF M12-1.75 X 30 8.8 PATCH	4	
9	23058	PLATFORM, FOOT	1	
10	23152	CABLE, THROTTLE.....	1.....	INCLUDES ITEMS W/@
11@		PIN, COTTER	1	

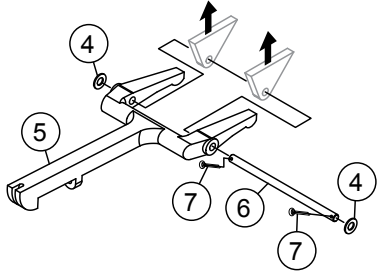
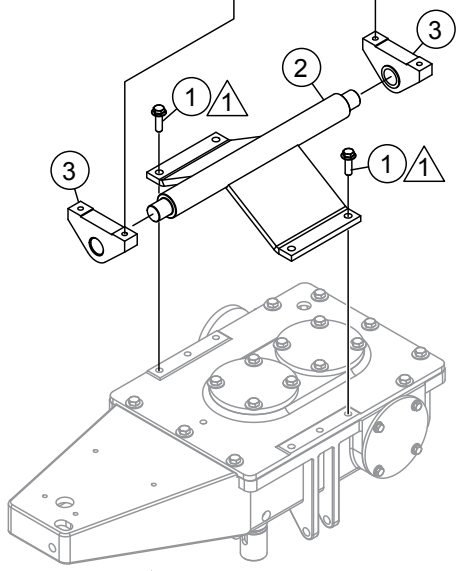
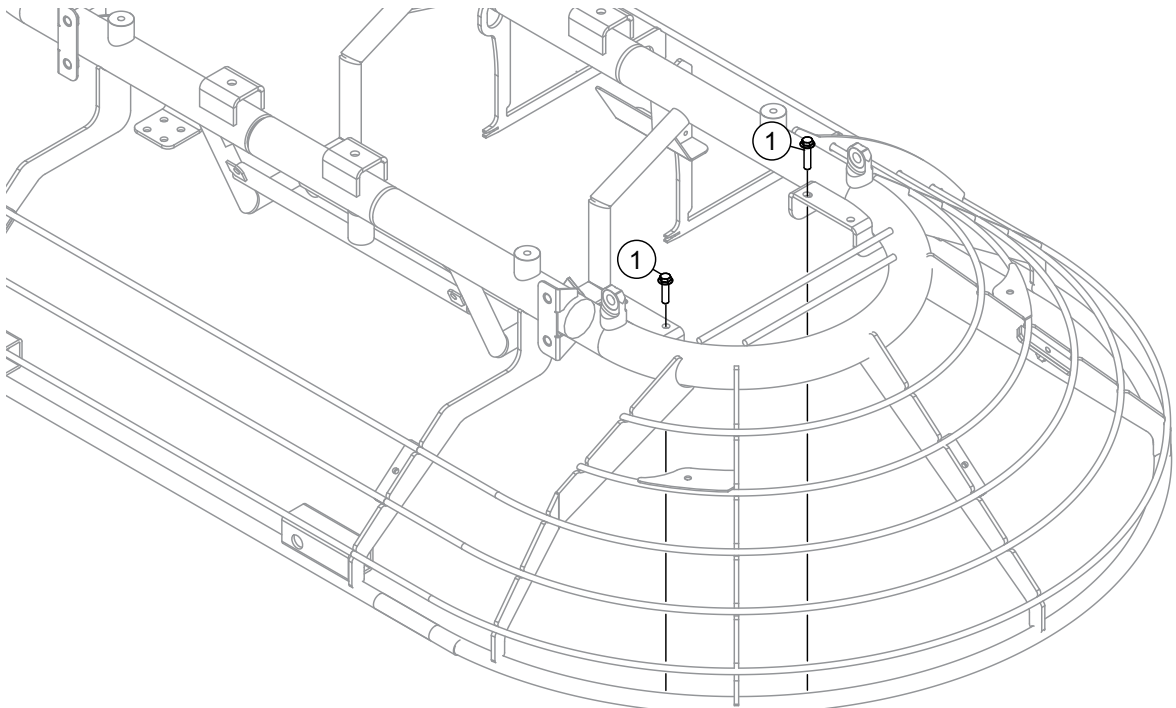
SPRAY ASSY.



SPRAY ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	2916	TANK, WATER, NPT BOSSES	1	
2	29509	CAP, FUEL TANK 2.25 DIA, ONE WAY VALVE	1	
3	2398	CLAMP, HOSE WORM #96 4.75" TO 6.50"	2	
4	A9312	FITTING, DRAIN COCK, 1/4" NPT	2	
5	2925	FITTING, PLASTIC 90 6BARB - 3/8MP	1	
6	2918	CLAMP, HOSE PLASTIC .475 DIA - .536 DIA	10	
7	60002	HOSE, PVC CLEAR .375 ID	5	SOLD BY FOOT
8	23307	TEE, 3/8 BARB PLASTIC	1	
9	23434	PUMP, SPRAY W/CONNECTOR	2	INCLUDES ITEMS W/@
10@	12548	PUMP, SPRAY, SHURFLO 100-000-21	2	
11@	37402	CONNECTOR KIT, DEUTSCH DT2 LOFA (F)	2	
12	923203	SCREW, SHC 1/4-20 X 3/4	4	
13	0447	WASHER, FLAT 1/2 SAE	2	
14	10022	FITTING, PLASTIC 6BARB-4BARB	2	
15	60001	HOSE, PVC CLEAR .250 ID	8	SOLD BY FOOT
16	23122	TEE, 1/4 BARB PLASTIC	2	
18	2912	FITTING, BRASS 90 4BARB-1/4FP	2	
19	2898	WASHER, BONDED NEOPRENE 1" X 1/2"	2	
20	392292	NOZZLE, SPRAY	2	
21	2478	FITTING, PETCOCK RAD DRAIN 1/4MP	1	
24	23076	CHECK VALVE, DUCKBILL 3/16	2	

PIVOT ASSY. (LEFT)

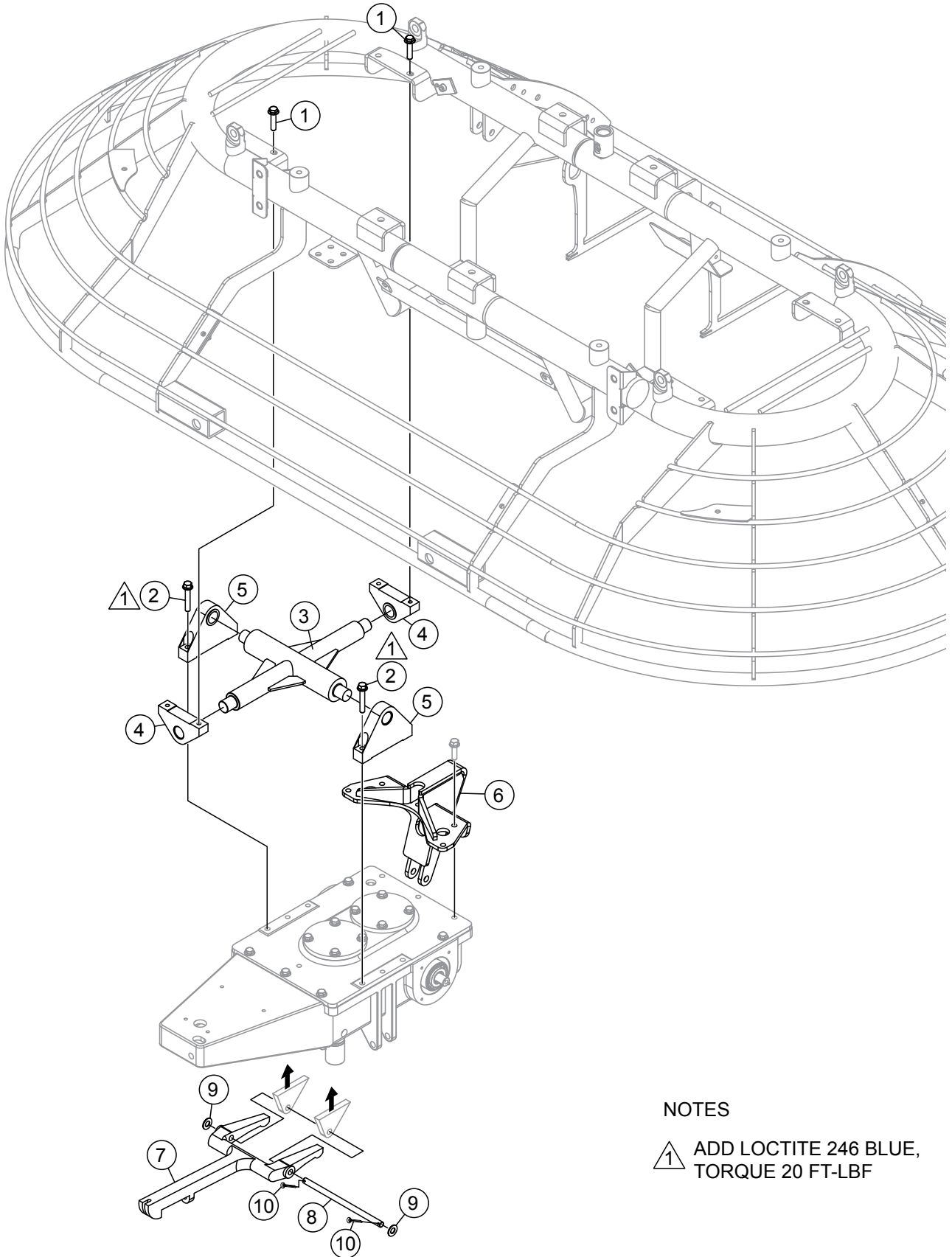


NOTES
 1 ADD LOCTITE 246 BLUE,
 TORQUE 20 FT-LBF

PIVOT ASSY. (LEFT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	22106	SCREW, HHFS 3/8-16 X 1.25 ZINC	8	
2	23088	PIVOT, GEAR BOX	1	
3	11555	PIVOT BLOCK ASM, MOTOR MOUNT W/BUSHING	2	
4	0448	WASHER, FLAT SAE 7/16	2	
5	11499	YOKE ARM, PITCH	1	
6	11648	SHAFT, YOKE PIVOT	1	
7	0183	PIN, COTTER 1/8D X 1-1/4	2	

PIVOT ASSY. (RIGHT)



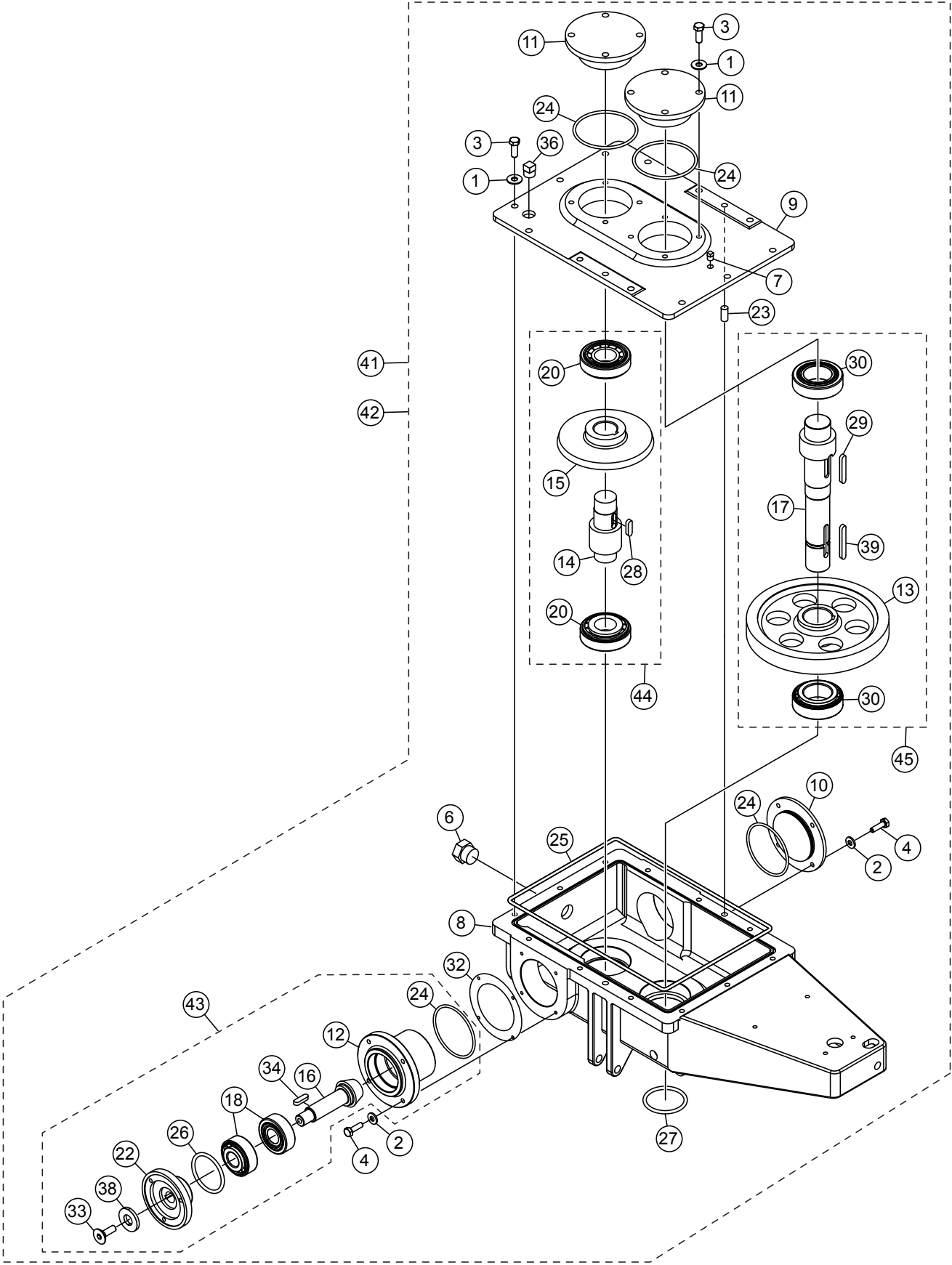
NOTES

▲ ADD LOCTITE 246 BLUE,
TORQUE 20 FT-LBF

PIVOT ASSY. (RIGHT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	22106	SCREW, HHFS 3/8-16 X 1.25 ZINC	4	
2	9167	SCREW, HHFS 3/8-16 X 2.25	4	
3	23090	TRUNNION, GEARBOX	1	
4	11555	PIVOT BLOCK ASM, MOTOR MOUNT W/BUSHING	2	
5	12713	ROCKER BLOCK ASY, GEARBOX 1.00 DIA	2	
6	23093	BRACKET, GEAR BOX STEERING SUPPORT	1	
7	11499	YOKE ARM, PITCH	1	
8	11648	SHAFT, YOKE PIVOT	1	
9	0448	WASHER, FLAT SAE 7/16	2	
10	0183	PIN, COTTER 1/8D X 1-1/4	2	

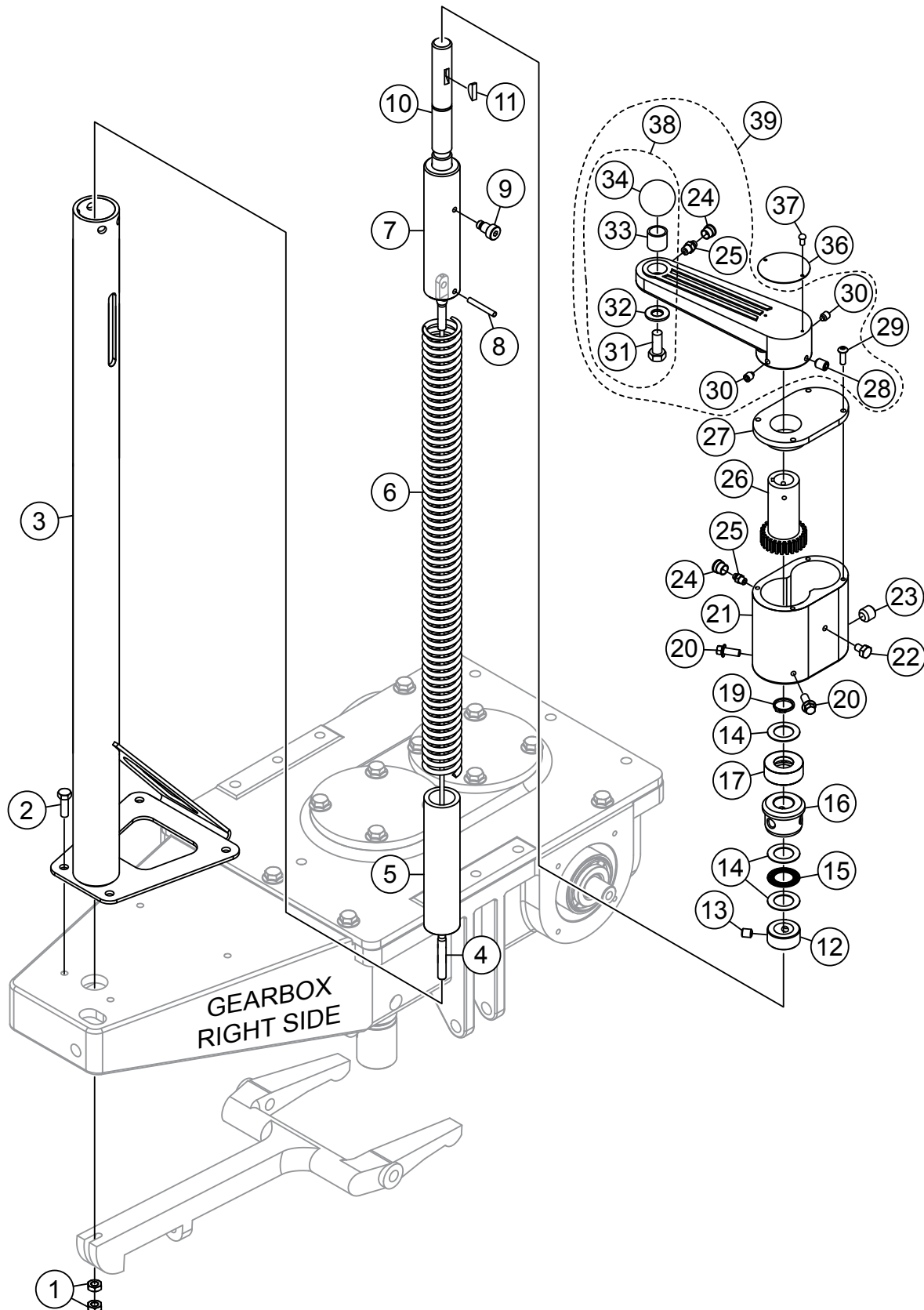
GEAR BOX ASSY.



GEAR BOX ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1\$	10136	WASHER, FLAT SAE 3/8	16	
2\$	0948	WASHER, FLAT SAE 1/4	8	
3\$	0205	SCREW, HHC 3/8-16 X 1	16	
4\$	2295	SCREW, HHC 1/4-20 X 7/8	8	
6\$	11584	SIGHT GLASS	1	
7\$	11682	FITTING, PLUG, 1/8 MP SQ HEAD	1	
8\$	21812	GEARBOX HOUSING	1	
9\$	21811	COVER, GEAR BOX	1	
10\$	21813	CAP, HELICAL GEARBOX INPUT	1	
11\$	21810	CAP, HELICAL GEARBOX IDLER	2	
12\$%		HUB, HELICAL INPUT SHAFT	1	MUST PURCHASE KIT
13\$+		GEAR, 85T HELICAL.....	1	MUST PURCHASE KIT
14\$@		PINION 17T, HELICAL.....	1	MUST PURCHASE KIT
15\$@		GEAR, SPIRAL BEVEL 60T 6.00PD	1	MUST PURCHASE KIT
16\$%		PINION, 15T SPIRAL BEVEL.....	1	MUST PURCHASE KIT
17\$+		SHAFT, OUTPUT	1	MUST PURCHASE KIT
18\$%	21803	BEARING, TAPERED ROLLER SET	2	
20\$@	21802	BEARING, TAPERED ROLLER SET	2	
22\$%		COUPLER, GEARBOX.....	1	MUST PURCHASE KIT
23\$	12697	PIN, DOWEL 0.375/.3752 X 3/4	2	
24\$%	12698	O RING	4	
25\$	12700	SEAL, CASE O-RING HHN 0.103 X 46.38	1	
26\$%	12701	SEAL	1	
27\$	12702	SEAL	1	
28\$@	12735	KEY, 3/8 X 3/4	1	
29\$+	12736	KEY, HARDENED 3/8 X 1-1/2	1	
30\$+	21801	BEARING, TAPERED ROLLER SET	2	
32\$	21800	SHIM, INPUT. 0.002 THICK	3	
33\$%	1313	SCREW, FHSC 3/8 - 24 X 3/4 PLAIN	1	
34\$%	26034	KEY, 3/16 X 17/32	1	
36\$	911064	FITTING, PLUG 1/2 MP SQ HEAD	1	
37\$	911329	FITTING, PLUG 3/8 MP MAGNETIC	2	
38\$%	9120	RETAINER, DRIVEN PULLEY	1	
39\$+	12687	KEY, 3/8 SQ X 2	1	
41	32214	GEARBOX ASSY., RIGHT	1	INCLUDES ITEMS W/\$
42	32213	GEARBOX ASSY., LEFT	1	INCLUDES ITEMS W/\$
43\$	21853854INPUT	KIT, INPUT PINION/HUB/COUPLER.....	1	INCLUDES ITEMS W/%
44\$	21853854INTER	KIT, INTER PINION/GEAR	1	INCLUDES ITEMS W/@
45\$	21853854OUTER	KIT, OUTPUT SHAFT/GEAR.....	1	INCLUDES ITEMS W/+

PITCH CONTROL TOWER ASSY.



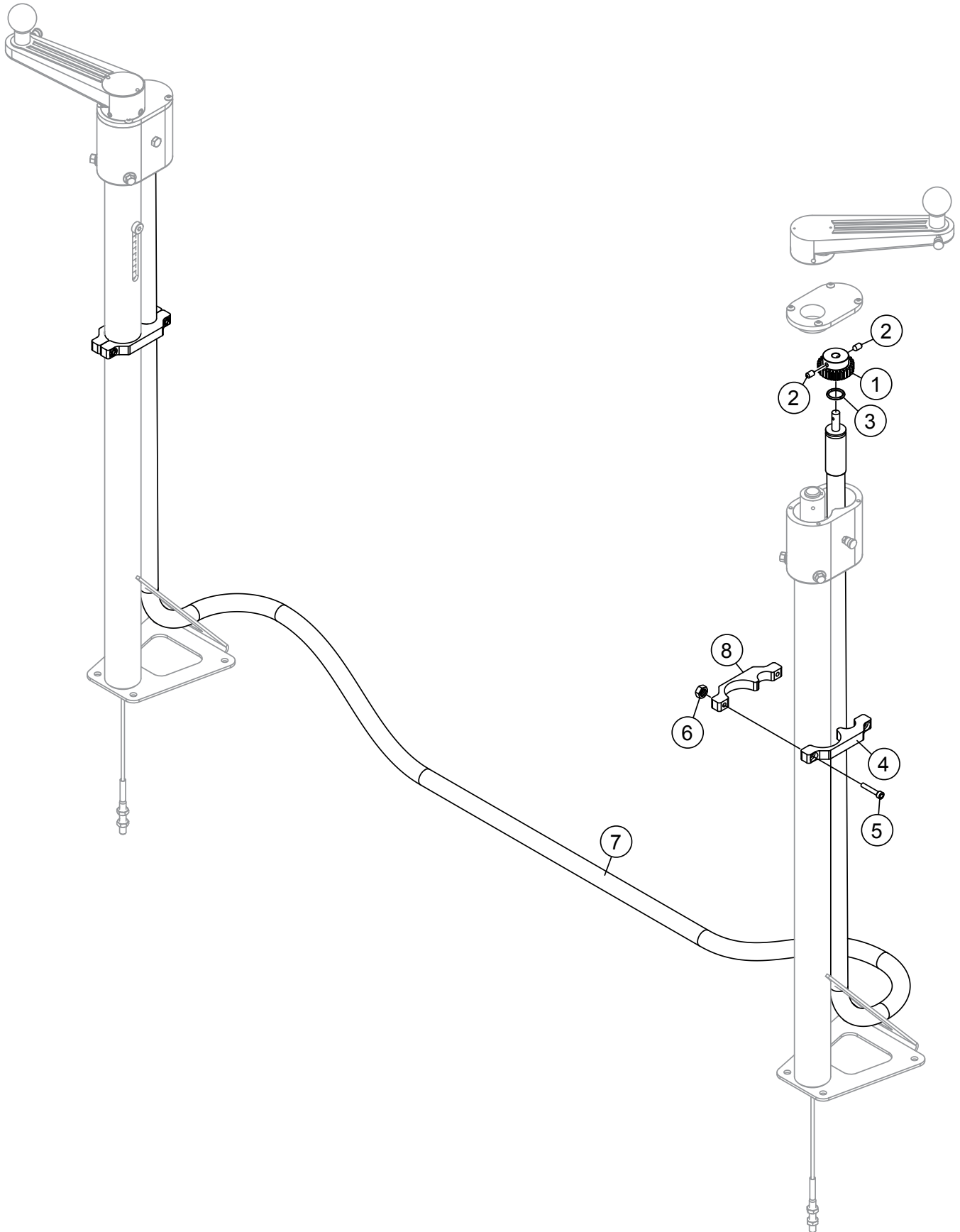
PITCH CONTROL TOWER ASSY.

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	1116	NUT, BRASS JAM 5/16-18	2	
2	9091	SCREW, HHFS 5/16-18 X 1 GR5	4	
3	23154	TOWER, PITCH CONTROL.....	1	RIGHT SIDE
3	23167	TOWER, PITCH CONTROL.....	1	LEFT SIDE
4	11623	CABLE ASSY, 32.38"	1	
5	11649	SPACER, PITCH SPRING	1	
6	2156	SPRING, HANDLE BALANCE COIL TWN RDR	1	
7	10721	SLIDE BLOCK, PITCH CONTROL	1	RIGHT SIDE
7	10722	SLIDE BLOCK, PITCH CONTROL	1	LEFT SIDE
8	10723	PIN, SPIRAL 3/16 X 1-3/8 HD	1	
9	10382	BOLT, SHOULDER, 3/8 X 3/8	1	
10	10510	SHAFT, PITCH CONTROL	1	RIGHT SIDE
10	10511	SHAFT, PITCH CONTROL	1	LEFT SIDE
11	0126	KEY, WOODRUFF #606 3/16 X 3/4 (#9)	1	
12	2367	COLLAR, SET .75 X 1.25 X .56	1	
13	925437	SCREW, SHS, CP 5/16-18 X 3/8	2	
14	2170	BEARING, RACE, TORR. #TRA1220	3	
15	2169	BEARING, THRUST, TORR. #NTA1220	1	
16	1612	BEARING, ALUM., PITCH CONTR.	1	
17	1604	BEARING, BALL THRUST E5 AETNA	1	
19	10512	RING, SNAP, TRUARC 5160-75	1	
20	22021	SCREW, HHFS M8-1.25 X 20 MM TENSILOK PATCH	2	
21	23037	HOUSING, PITCH CONTROL	1	
22	20476	SCREW, HHC 1/4-28 X 3/8	1	
23	17109	SCREW, SHSCU M8-1.25 X 8MM	1	
24%	2621	FITTING, GREASE ZERK STR 1/4-28	2	
25%	1162 A	CAP, GREASE ZERK, #2 YELLOW	2	
26	1529	GEAR, DRIVE PITCH CONTROL	1	
27	2649	COVER, PITCH CONTROL HOUSING	1	
28%	0185	SCREW, SHS 3/8-16 X 3/8, NO PLATE	1	
29	9191	SCREW, BHSC M5-0.8 X 16MM	4	
30%	1528	SCREW, SHS 1/4-20 X 5/16 H.D.P.	2	
31@%	1616	BOLT, SHOULDER .5 DIA X .469 X 3/8-16	1	
32@%	1733	WASHER, 1/2 X 1/32, AN960-816L	1	
33@%	3231	SPACER, .75 DIA X .406 DIA. X .688	1	
34@%	4403	KNOB, ROUND 1-3/8 DIA. X 3/8-16 BLACK	1	
36	2300	DECAL, PITCH	1	RIGHT SIDE
36	2332	DECAL, PITCH	1	LEFT SIDE
37	4014	SCREW, #2, 3/16 P-K TYPE U DRIVE	2	
38%	2737	KNOB, KIT	1	INCLUDES ITEMS W/@
39	1617	LEVER ASSY., TROWEL ADJUSTMENT	1	INCLUDES ITEMS W/%

NOTICE

Indicated quantities are for one pitch tower. If ordering for two pitch towers, double the quantity.

PITCH CONTROL DRIVE CABLE ASSY.

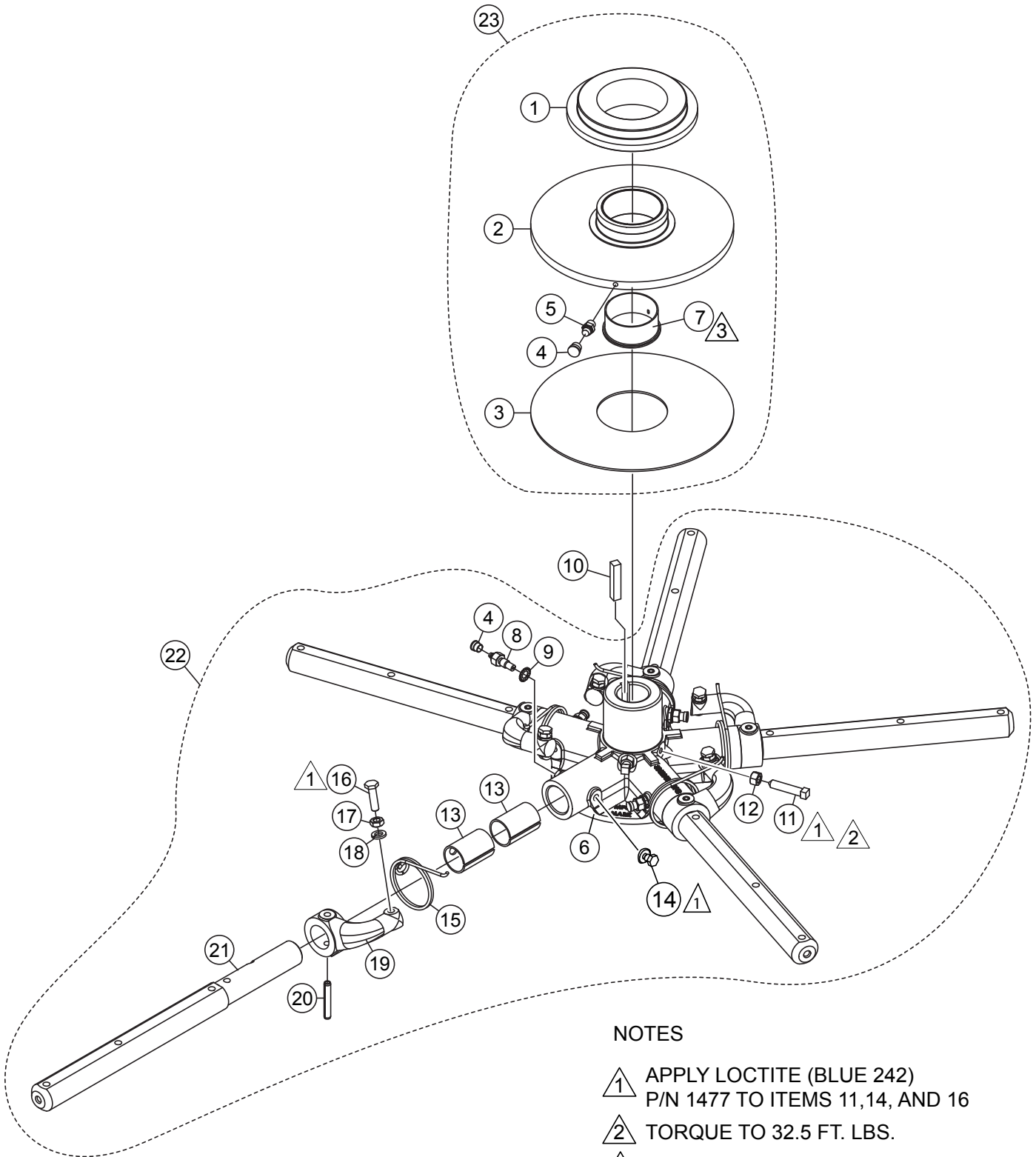


PITCH CONTROL DRIVE CABLE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23036	GEAR, PITCH CONTROL	2	
2	9195	SCREW, SHS M5-0.8 X 10 CONE PT PATCH	4	
3	9196	O-RING, SIZE 2-118 BUNA-N 70	2	
4	23295	CLAMP, PITCH CABLE.....	4.....	APRIL 2011 AND BELOW
4	23295	CLAMP, PITCH CABLE.....	2.....	MAY 2011 AND ABOVE
5	37325	SCREW, SHC M5-0.8 X 30MM	4	
6	940150	NUT, HEX FULL M5-0.8P	4.....	APRIL 2011 AND BELOW
7	23017	DRIVE CABLE, PITCH CONTROL	1	
8	23615	CLAMP, PITCH CABLE, THREADED	2.....	MAY 2011 AND ABOVE

SPIDER ASSY. (LEFT)

LEFT-SIDE SPIDER ASSEMBLY (5-BLADE).
VIEW FROM OPERATORS SEAT.



NOTES

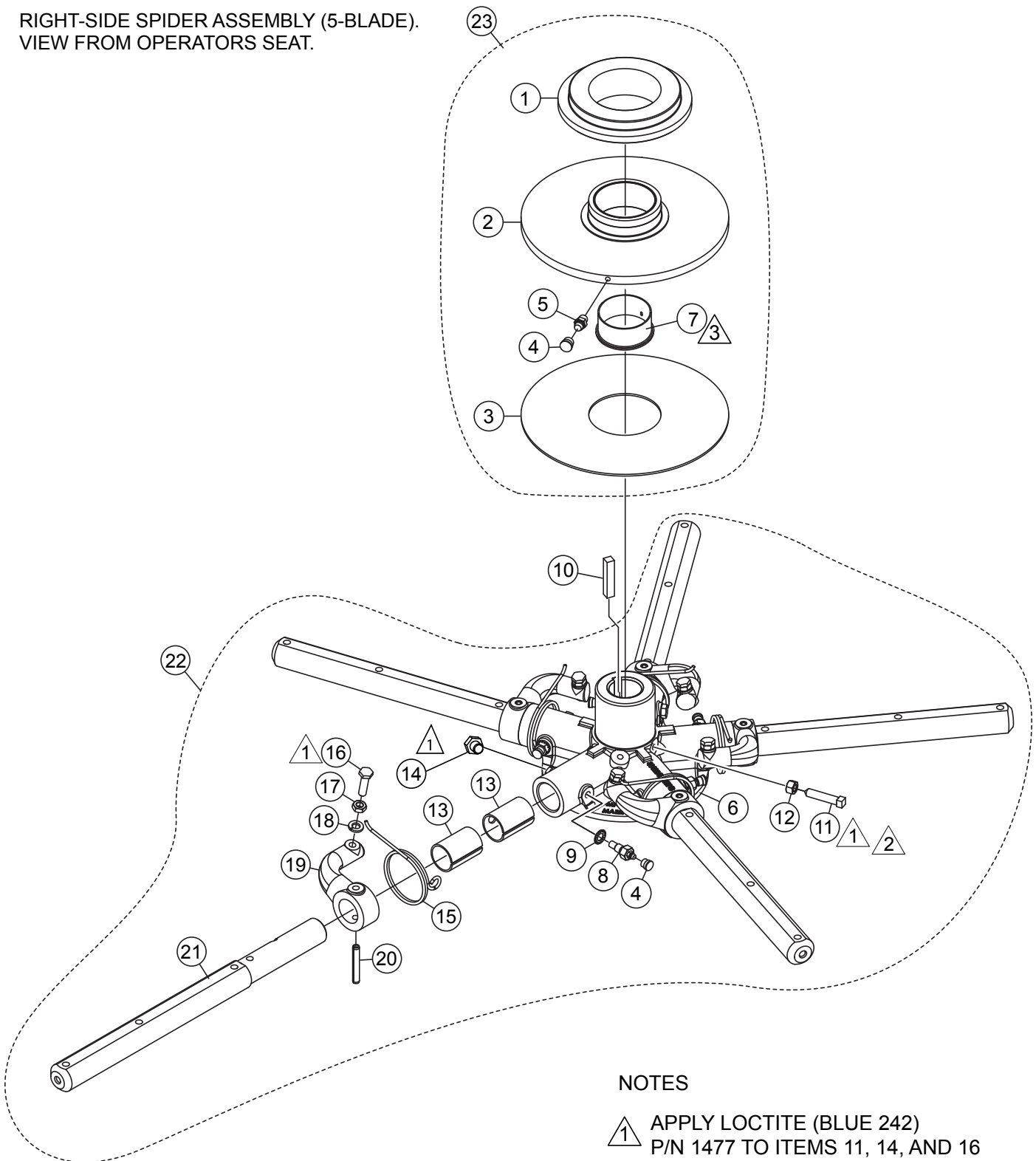
- ▲ 1 APPLY LOCTITE (BLUE 242)
P/N 1477 TO ITEMS 11, 14, AND 16
- ▲ 2 TORQUE TO 32.5 FT. LBS.
- ▲ 3 PART OF ITEM 2 (P/N 11431)

SPIDER ASSY. (LEFT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1#	12779	BEARING, THRUST 6017-24S W/FLNG	1	
2#	11431	THRUST COLLAR W/BUSHING	1	
3#	11419	PLATE, WEAR	1	
4#	1162 A	CAP, GREASE ZERK, #2 YELLOW	6	
5#	2621	FITTING, GREASE ZERK STR 1/4-28	1	
6#	12931-1	SPIDER PLATE, 5BLD L.S.1-1/2"	1	
7#	12316	BUSHING, THRUST COLLAR W/ HOLE	1	
8@	1322	SCREW, ARM RETAINING	5	
9@	1875	WASHER, INT. SHKP, 3/8	5	
10	12687	KEY, 3/8 SQ X 2	1	
11@	12097	SCREW, SQHS 3/8-16 X 1-3/4 CONE GRD 8 PT'D	2	
12@	1456	NUT, HEX FINISH 3/8-16	2	
13@	11039	BUSHING, TROWEL LARGE ARM	10	
14	11602	SCREW, HHC 3/8-16 X 1/4	5	
15@	9111	SPRING, LS H ARM RETURN STD BOSS	5	
16@	0164 B	SCREW, HHC ROUNDED 3/8-16 SPCL	5	
17@	1876	NUT, HEX JAM 3/8-16 CLASS 2B	5	
18@	0166 A	WASHER, LOCK, 3/8 MED.	5	
19@	11903-1	LEVER, TROWEL ARM, LEFT	5	
20@	9006	PIN, ROLL 5/16 X 2 NO PLATE	5	
21@	2829-1	ARM, TROWEL HD EXTENDED	5	
22	12932	SPIDER ASSY. 5 BLD L.S. 1-1/2"	1	INCLUDES ITEMS W/@
23	20938	THRUST COLLAR ASSY.	1	INCLUDES ITEMS W/#

SPIDER ASSY. (RIGHT)

RIGHT-SIDE SPIDER ASSEMBLY (5-BLADE).
VIEW FROM OPERATORS SEAT.



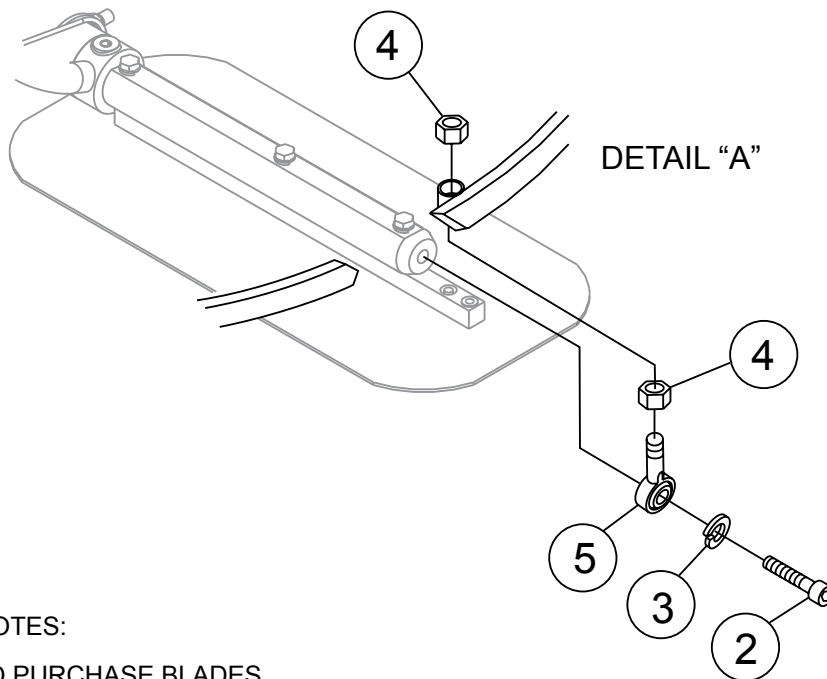
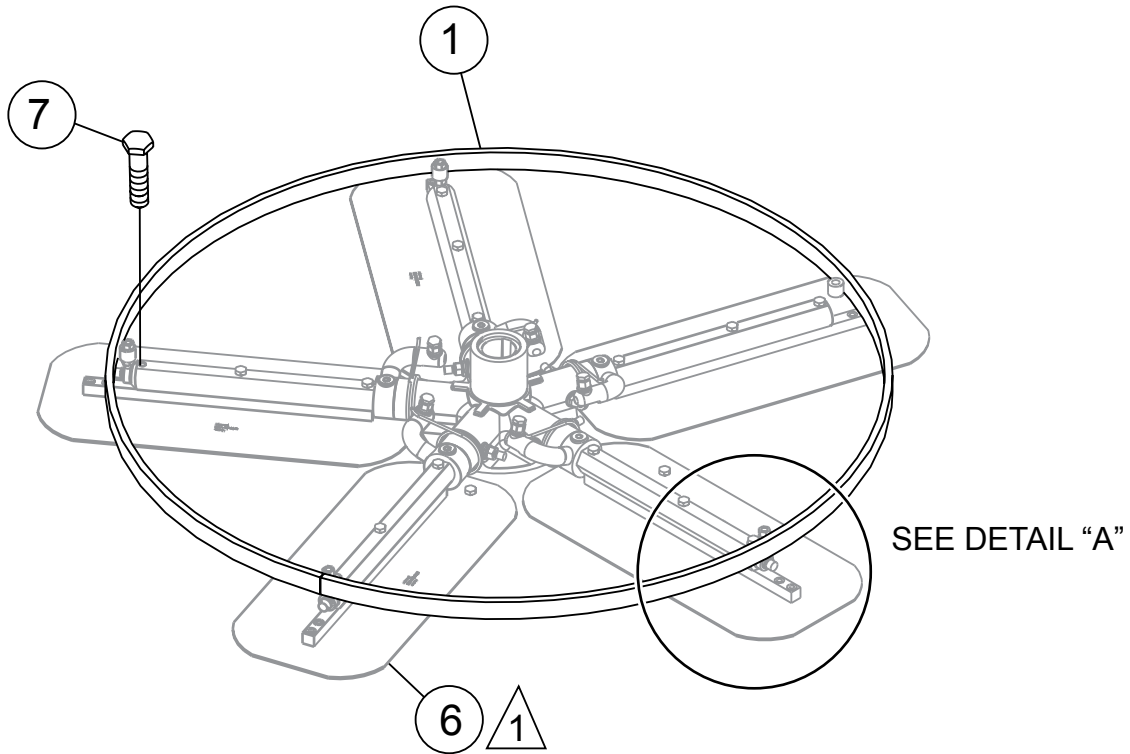
NOTES

- ① APPLY LOCTITE (BLUE 242)
P/N 1477 TO ITEMS 11, 14, AND 16
- ② TORQUE TO 32.5 FT. LBS.
- ③ PART OF ITEM 2 (P/N 11431)

SPIDER ASSY. (RIGHT)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1#	12779	BEARING, THRUST 6017-24S W/FLNG	1	
2#	11431	THRUST COLLAR W/BUSHING	1	
3#	11419	PLATE, WEAR	1	
4#	1162 A	CAP, GREASE ZERK, #2 YELLOW	6	
5#	2621	FITTING, GREASE ZERK STR 1/4-28	1	
6@	12931-1	SPIDER PLATE, 5 BLD R.S. 1-1/2"	1	
7#	12316	BUSHING, THRUST COLLAR W/ HOLE	1	
8@	1322	SCREW, ARM RETAINING	5	
9@	1875	WASHER, INT. SHKP, 3/8	5	
10	12687	KEY, 3/8 SQ X 2	1	
11@	12097	SCREW, SQHS 3/8-16 X 1-3/4 CONE GRD 8 PT'D	2	
12@	1456	NUT, HEX FINISH 3/8-16	2	
13@	11039	BUSHING, TROWEL LARGE ARM	10	
14	11602	SCREW, HHC 3/8-16 X 1/4	5	
15@	2143	SPRING, RS H ARM RETURN STD BOSS	5	
16@	0164 B	SCREW, HHC ROUNDED 3/8-16 SPCL	5	
17@	1876	NUT, HEX JAM 3/8-16 CLASS 2B	5	
18@	0166 A	WASHER, LOCK, 3/8 MED.	5	
19@	11904-1	LEVER, TROWEL ARM, RIGHT	5	
20@	9006	PIN, ROLL 5/16 X 2 NO PLATE	5	
21@	2829-1	ARM, TROWEL HD EXTENDED	5	
22	12933	SPIDER ASSY. 5 BLD R.S. 1-1/2"	1	INCLUDES ITEMS W/@
23	20938	THRUST COLLAR ASSY	1	INCLUDES ITEMS W/#

STABILIZER RING ASSY.



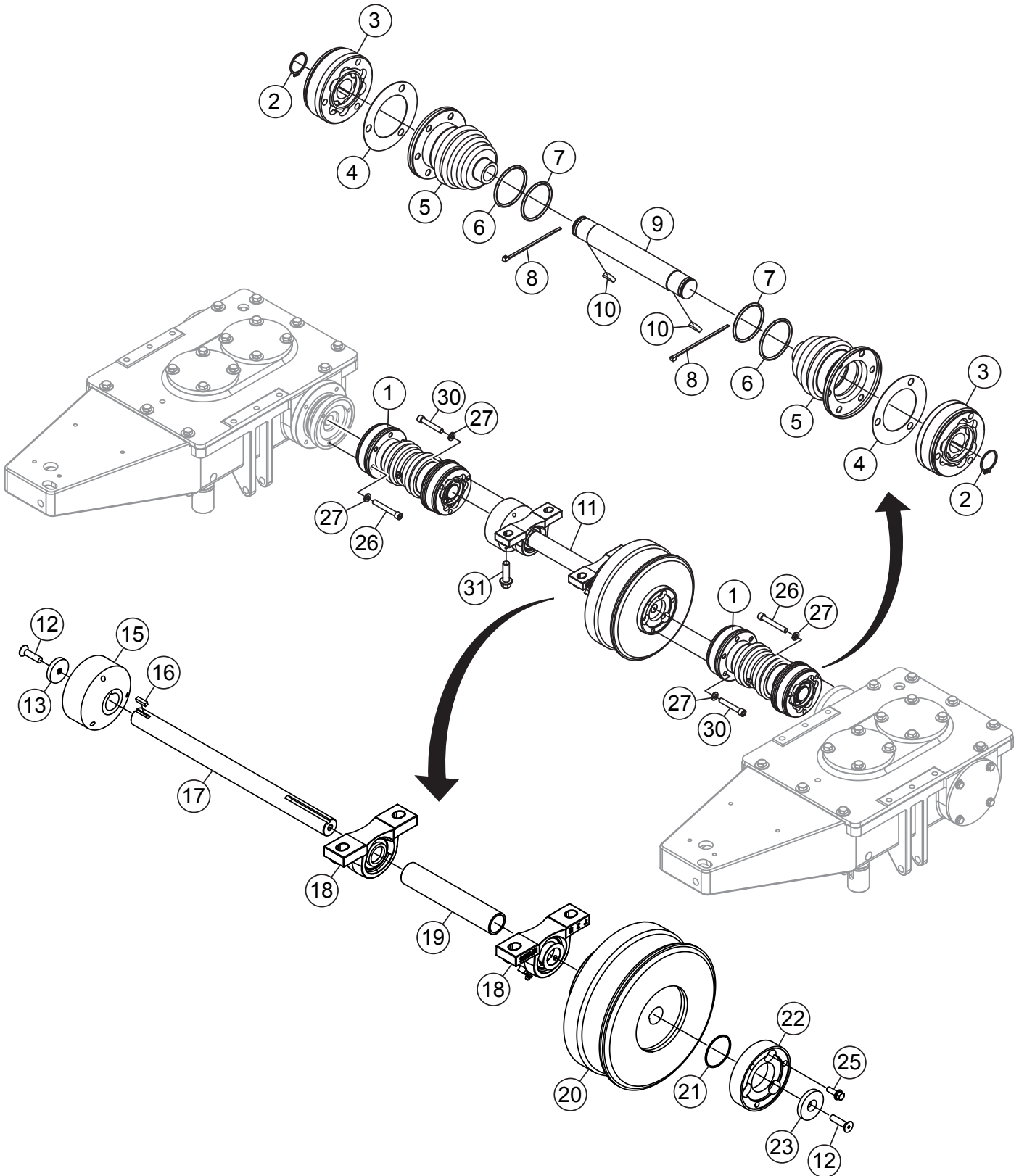
NOTES:

△ 1 TO PURCHASE BLADES
CONTACT UNIT SALES DEPT.

STABILIZER RING ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	A9204	RING, STABILIZER	2	
2	1237	SCREW, SHC 5/16-18 X 7/8 NYLOC	10	
3	0300 B	WASHER, FLAT, SAE 5/16	10	
4	6014 C	NUT, HEX FINISH 5/16-24	20	
5	1723	ROD END, 5/16-24 MALE RH	10	
6		BLADE ASSY.	10.....	CONTACT UNIT SALES
7	22174	SCREW, HHFS 5/16-18 X 1-3/4 GR5	30	

DRIVE ASSY. (OLD STYLE)



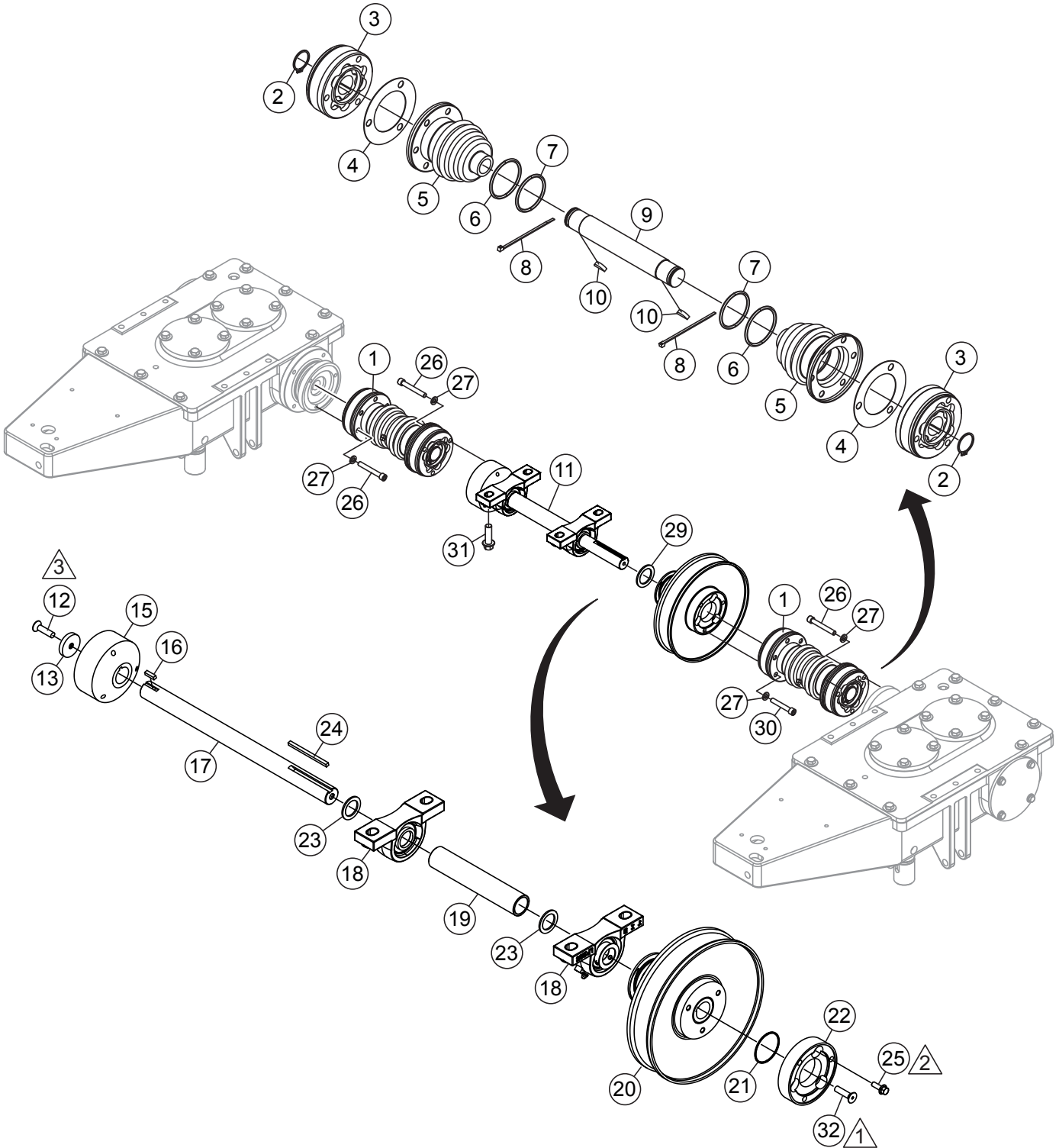
DRIVE ASSY. (OLD STYLE)

NO.	PART NO.	PART NAME	QTY.	REMARKS
1	23140	SHAFT, DRIVE CV JOINT ASSY	2	INCLUDES ITEMS W/@
2@	2090	SNAP RING, TRUARC#5100-106 1.062 DIA X .056	2	
3@	392052	C.V. JOINT, COUPLING	2	
4@	11108	GASKET, C.V. JOINT BOOT RIDERS	2	
5@	2259	BOOT ASSY, C.V. JOINT RIDERS	2	INCLUDES ITEMS W/#
6@#	22219	O-RING, SIZE 2-228N-90 2.25 DIA X .125	2	
7@#	22220	O-RING, SIZE 2-225N-90 1.875 DIA. X .125	2	
8@	1662	TIE, CABLE TY-RAP BLACK	2	
9@	23150	SHAFT, C.V. JOINT 7.70LG	1	
10@	0126	KEY, WOODRUFF #606 3/16 X 3/4 (#9)	2	
11		DRIVE, CROSS SHAFT ASSY	1	INCLUDES ITEMS W/% NO LONGER AVAILABLE USE KIT P/N 23447 TO UPGRADE TO MULTI-CLUTCH SYSTEM
12%	9092	SCREW, FHSC 5/16-18X1.25 NYLON PATCH	2	
13%	2037	SPACER, CSK 1.375 DIA. X .328 DIA. X .250	1	
15%	23162	COUPLER, C.V. SHAFT DRIVE	1	
16%	10909	KEY, SQ 3/16 X 11/16	1	
17%	23033	SHAFT, DRIVE BEARING	1	
18%	10337	BEARING, P-BLOCK 1.0" - JIB #VPLS205-16	2	
19%	23141	SPACER, 1.25 DIA. X 1.01 DIA. X 6.583"	1	
20%		PULLEY, CVT LOWER COMET	1	NO LONGER AVAILABLE USE KIT P/N 23447 TO UPGRADE TO MULTI-CLUTCH SYSTEM
21%	20116	O-RING, SIZE-031 BUNA N	1	
22%	23156	COUPLER, CV-JOINT TO COMET CLUTCH	1	
23%	23151	SPACER, CSK CENTERING 1.735 D X .328 D X .35	1	
25%	9165	SCREW, HHFS 1/4-28 X 3/4 GR5 PATCH	3	
26	2186	SCREW, SHC 5/16-16 X 2-1/4 PLTD	6	
27	0161 C	WASHER, LOCK, 5/16 MED	12	
30	0243	SCREW, SHC 5/16- 18 X 1-3/4	6	
31	23305	SCREW, HHF M12-1.75 X 30	4	

NOTICE

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DRIVE ASSY. (NEW STYLE)



NOTES

- △ 1 TORQUE TO 15 FT-LBF
- 2 TORQUE TO 10 FT-LBF
- 3 TORQUE TO 30 FT-LBF

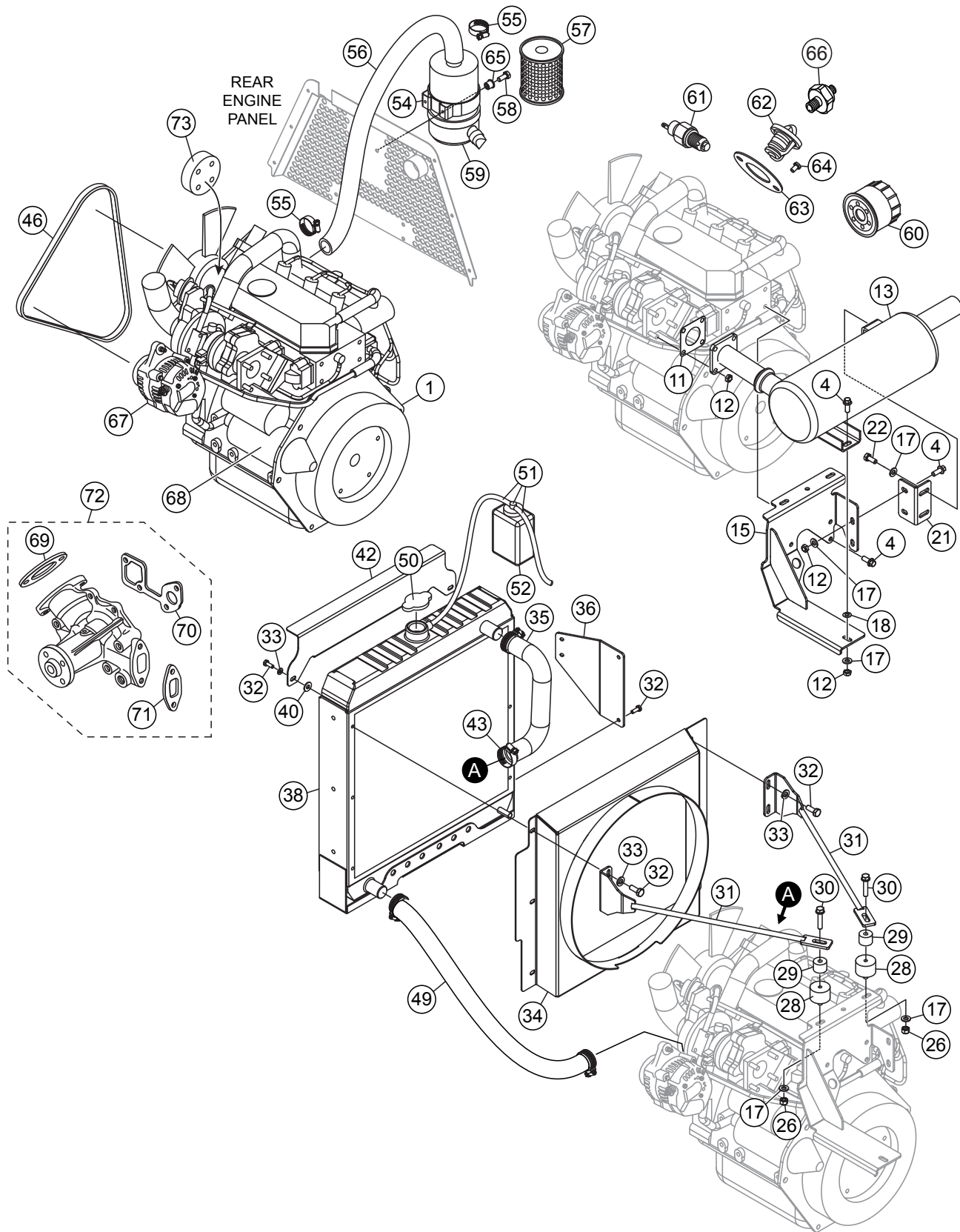
DRIVE ASSY. (NEW STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23140	SHAFT, DRIVE CV JOINT ASSY	2	INCLUDES ITEMS W/@
2@	2090	SNAP RING, TRUARC#5100-106 1.062 DIA X .056	2	
3@	392052	C.V. JOINT, COUPLING	2	
4@	11108	GASKET, C.V. JOINT BOOT RIDERS	2	
5@	2259	BOOT ASSY, C.V. JOINT RIDERS	2	INCLUDES ITEMS W/#
6@#	22219	O-RING, SIZE 2-228N-90 2.25 DIA X .125	2	
7@#	22220	O-RING, SIZE 2-225N-90 1.875 DIA. X .125	2	
8@	1662	TIE, CABLE TY-RAP BLACK	2	
9@	23150	SHAFT, C.V. JOINT 7.70LG	1	
10@	0126	KEY, WOODRUFF #606 3/16 X 3/4 (#9)	2	
11	23425	DRIVE, CROSS SHAFT ASSY	1	INCLUDES ITEMS W/%
12%	1146	SCREW, FHSC 5/16-18X1, NYLON, NP	1	
13%	2037	SPACER, CSK 1.375 DIA. X .328 DIA. X .250	1	
15%	23162	COUPLER, C.V. SHAFT DRIVE	1	
16%	10909	KEY, SQ 3/16 X 11/16	1	
17%	23423	SHAFT, DRIVE BEARING	1	
18%	10337	BEARING, P-BLOCK 1.0" - JIB #VPLS205-16	2	
19%	23424	SPACER, 1.25 DIA. X 1.01 DIA. X 6.28"	1	
20	23363-2	PULLEY, CVT DRIVEN HILLIARD	1	
21	20116	O-RING, SIZE-031 BUNA N	1	
22	23420	COUPLER, DRIVEN CCVT	1	
23%	11773	SHIM, STEEL .031 X 1.5 DIA. X 1.0 XIA.	2	
24%	20363	KEY, STEEL .188 X .250 X 2.5	1	
25	9165	SCREW, HHFS 1/4-28 X 3/4 GR5 PATCH	3	
26	2186	SCREW, SHC 5/16-16 X 2-1/4 PLTD	9	
27	0161 C	WASHER, LOCK, 5/16 MED	12	
29	11772	SHIM, TRUNNION .063	A/R	
30	0243	SCREW, SHC 5/16- 18 X 1-3/4	3	
31	23305	SCREW, HHF M12-1.75X30MM GR8.8 PATCH	4	
32	9092	SCREW, FHSC 5/16-18X1.25, NYLON PATCH	1	

NOTICE

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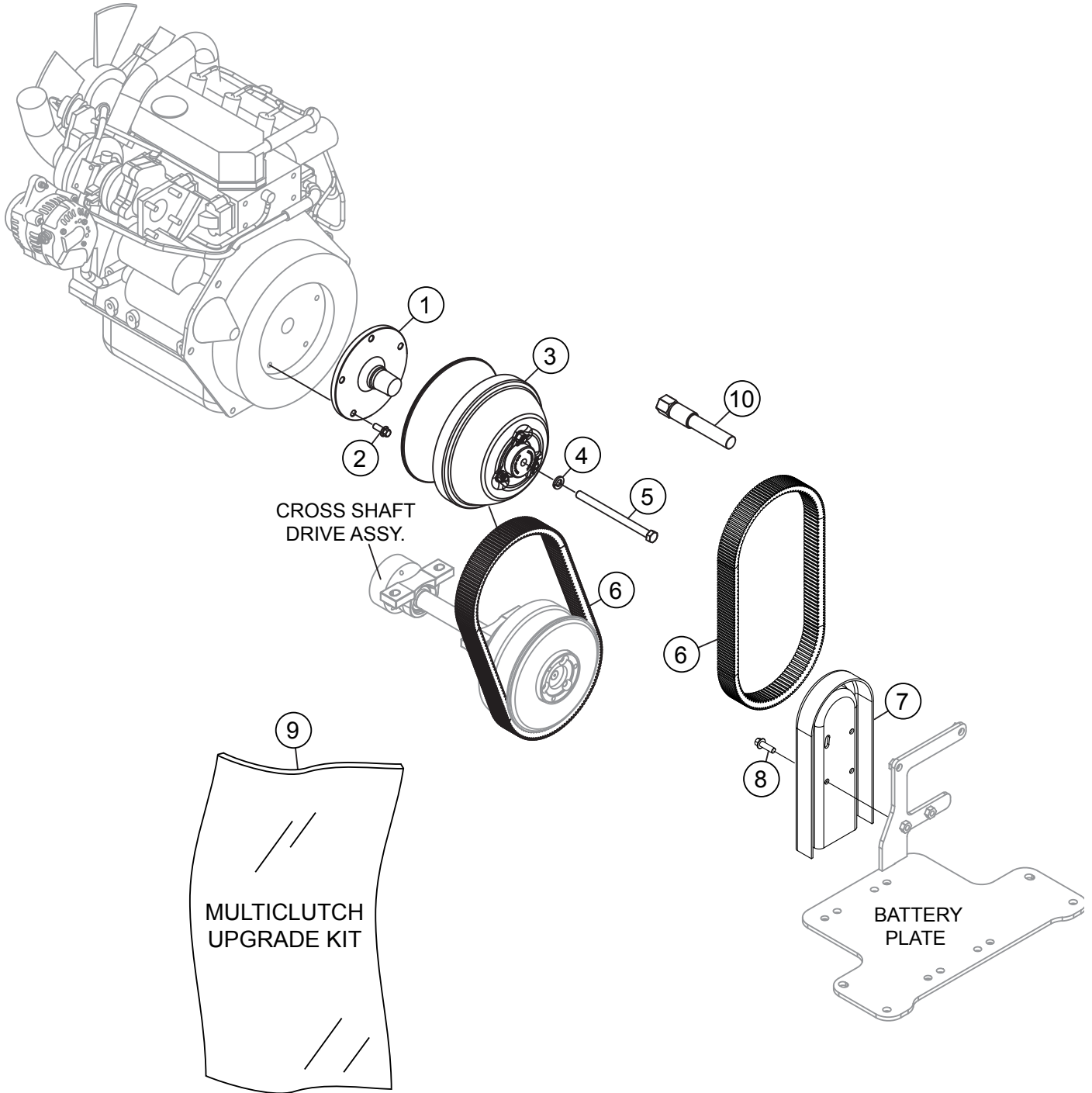
ENGINE ASSY.



ENGINE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23014	ENGINE, BRIGGS 34HP, DM950DTH DIESEL	1	INCLUDES ITEMS W/@
4	22021	SCREW, HHFS M8-1.25X20MM TENSILOK PATCH	6	
11@		GASKET, EXHAUST	1	
12	20440	NUT, HEX LOCK M8-1.25 DEFORMED THIN	7	
13	21451	MUFFLER, HHN ACS STAINLESS 34VTD	1	
15	23561	BRACKET, EXHAUST MOUNT	1	REPLACES P/N 23310
17	0300 B	WASHER, FLAT SAE 5/16	7	
18	37250	WASHER, BELLEVIEW, .317 X .625	1	
21	23075	MOUNT, UPPER MUFFLER SUPPORT	1	
22	0655	SCREW, HHC 5/16-18 X 3/4	2	
26	5283	NUT, NYLOC 5/16-18	2	
28	21231	ISOLATOR, PLATE, STUD 5/16	2	
29	21391	SPACER, 1.0 OD X .318 ID X .75 L	2	
30	21906	SCREW, HHFS 5/16-18 X 1-1/2 GR5	2	
31	23315	STRUT, RADIATOR	2	
32	12464	SCREW, HHC M6-1.0 X 16MM	10	
33	0181 B	WASHER, LOCK, 1/4 MEDIUM	8	
34	23300	SHROUD, RADIATOR	1	
35	23312	HOSE, RADIATOR, UPPER	1	
36	23280	MOUNT, RADIATOR OVERFLOW	1	
38	23299	RADIATOR	1	
40	25334	WASHER, FLAT USS 1/4	2	
42	23321	BAFFLE, RADIATOR FRONT	1	
43	21552	CLAMP, HOSE WORM #16 13/16 TO 1-1/2	4	
46	821075	V-BELT	1	
49	825133	HOSE, RADIATOR, LOWER	1	
50	820258	CAP, RADIATOR	1	
51	825461	CAP, HOSE RESERVE	1	
52	825462	TANK, RESERVE	1	
53	825461	CAP AND HOSES, RESERVE	1	
54	820230	CLAMP, AIR CLEANER	1	
55	10434	CLAMP, HOSE WORM #32 1-9/16-2.0	2	
56	21496	HOSE, AIR CLEANER	1	
57	M113621	ELEMENT, AIR CLEANER	1	
58	12287	SCREW, THP 1/4-20 X 3/4 SS	2	
59	23014-07	AIR CLEANER	1	
60	820314	FILTER, OIL	1	
61	23014-03	SWITCH, WATER TEMPERATURE	1	
62	825064	THERMOSTAT	1	INCLUDES ITEMS W/%
63%	820093	GASKET, OUTLET	1	
64%	820185	SCREW, THERMOSTAT	1	
65	19266	NUT, BLIND 1/4-20 X 10GA	2	
66	821135	SWITCH, OIL PRESSURE	1	
67	23014-04	ALTERNATOR, 60A DM950	1	
68	825700	STARTER MOTOR	1	
69#	820093	OUTLET HOUSING GASKET	1	
70#	820100	WATER PUMP GASKET	1	
71#	820098	INLET HOUSING GASKET	1	
72	825639	WATER PUMP	1	INCLUDES ITEMS W/#
73	23014-16	SPACER, FAN	1	

ENGINE CLUTCH ASSY. (OLD STYLE)



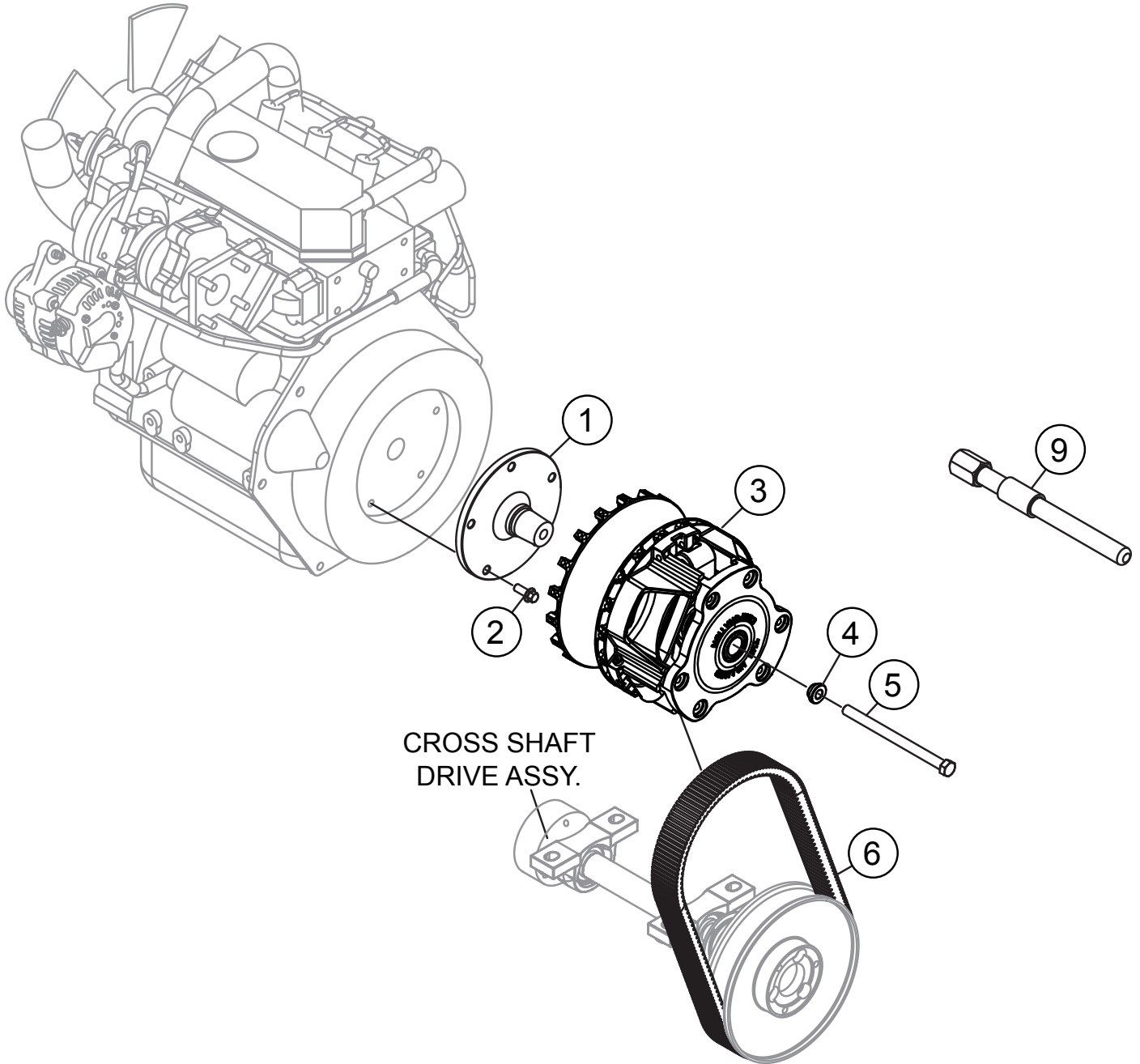
ENGINE CLUTCH ASSY. (OLD STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23044	STUB SHAFT, CVT CLUTCH 33MM 31/34V	1	
2	22021	SCREW, HHFS M8-1.25X20MM TENSILOK PATCH	5	
3		CLUTCH, DRIVE CVT 34V DIESEL	1	NO LONGER AVAILABLE
			USE KIT P/N 23447 TO UPGRADE
			TO MULTI-CLUTCH SYSTEM
4	2955	WASHER, LOCK 7/16 ZINC	1	
5	9164	SCREW, HHC 7/16-20X6.00 GR8 PATCH	1	
6	20138	BELT, CVT CLUTCH COMET #302609 DF	2	
7	2429	BELT HOLDER, CVT SPARE BELT	1	
8	15226	SCREW, HHF M8-1.25 X 25MM	1	
9	23447	KIT, MULTCLUTCH UPGRADE	1	
10	23291	TOOL, CLUTCH REMOVAL	1	

NOTICE

Multi-Clutch components are not interchangeable with the prior Hoffco Comet drive system. The Hoffco Comet CVT system must be replaced with Multi-Clutch components in the event of a Hoffco Comet clutch failure.

ENGINE CLUTCH ASSY. (NEW STYLE)



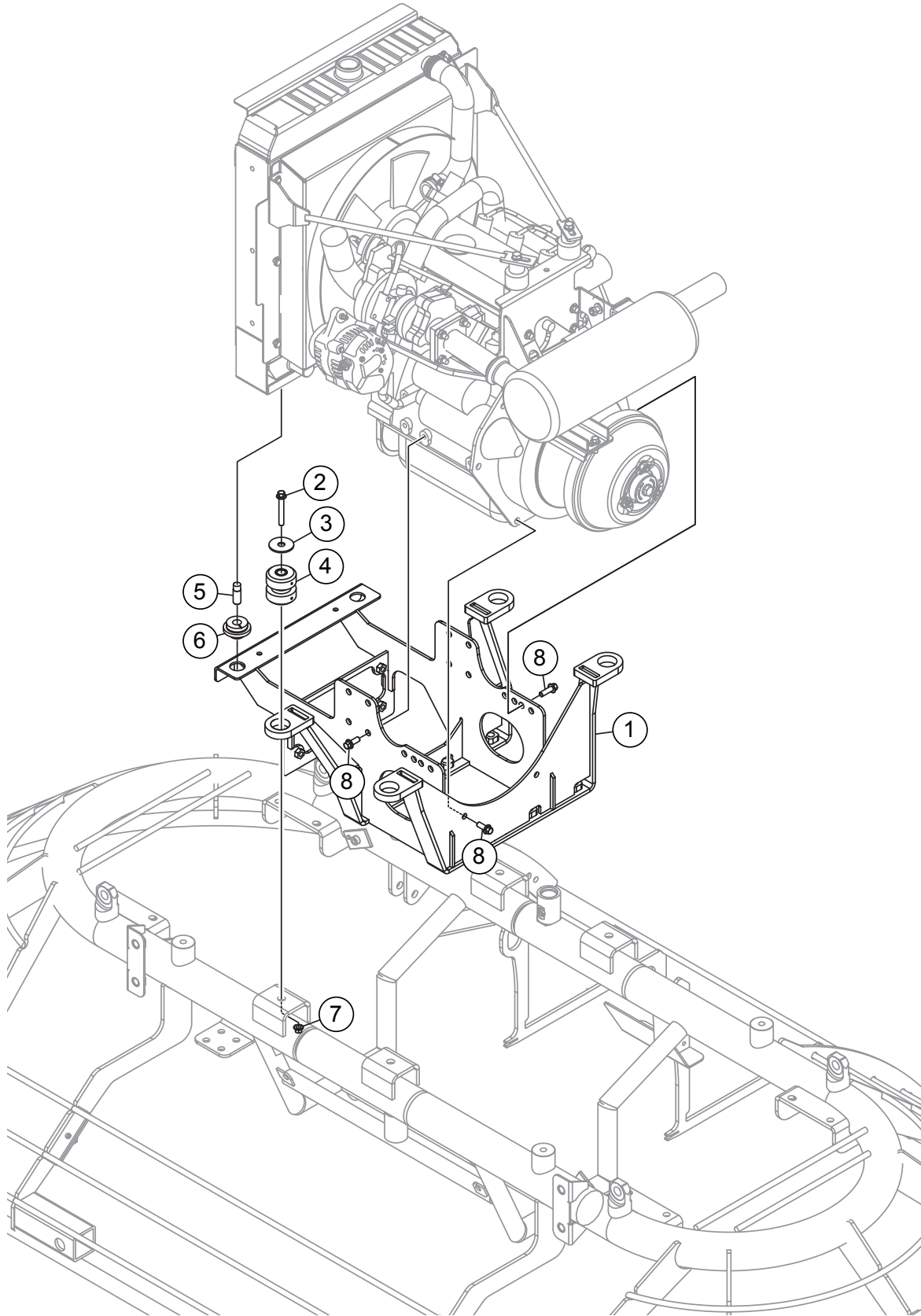
ENGINE CLUTCH ASSY. (NEW STYLE)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23368	SHAFT, STUB BRIGGS TAPER	1	
2	22021	SCREW, HHFS M8-1.25X20MM TENSILOK PATCH	5	
3	23363-1	CLUTCH, CVT DRIVE W/TAPER-HIL	1	
4	23369	WASHER, STEP 7/16	1	
5	23377	SCREW, HHC 7/16-20X6.5 GR8	1	
6	23365	BELT, CVT MULTI-CLUTCH	1	
9	23371	PULLER, MULTI-CLUTCH	1	

NOTICE

Multi-Clutch components are not interchangeable with the prior Hoffco Comet drive system. The Hoffco Comet CVT system must be replaced with Multi-Clutch components in the event of a Hoffco Comet clutch failure.

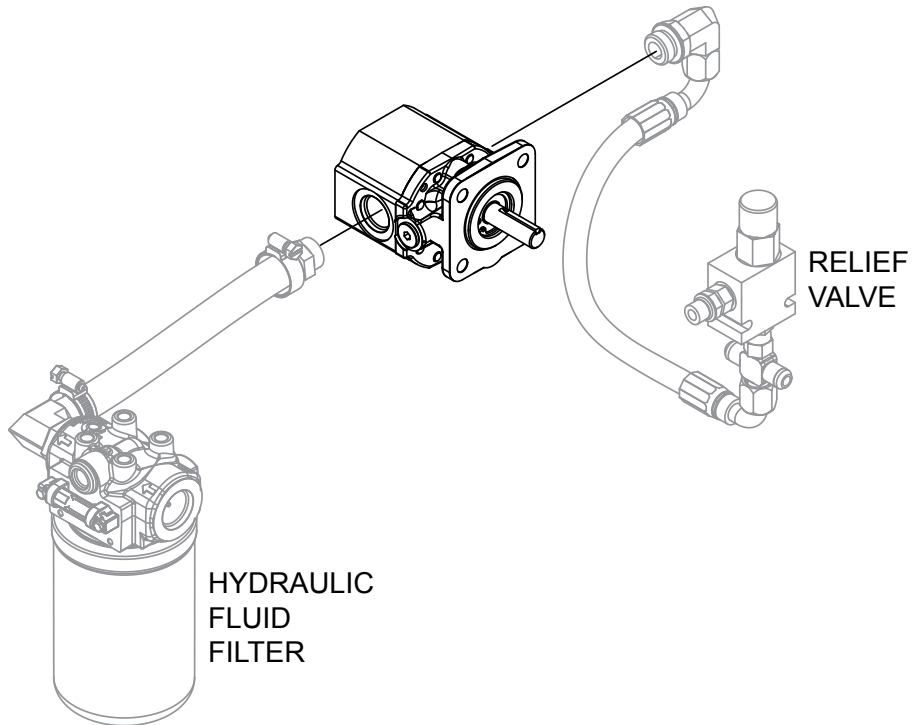
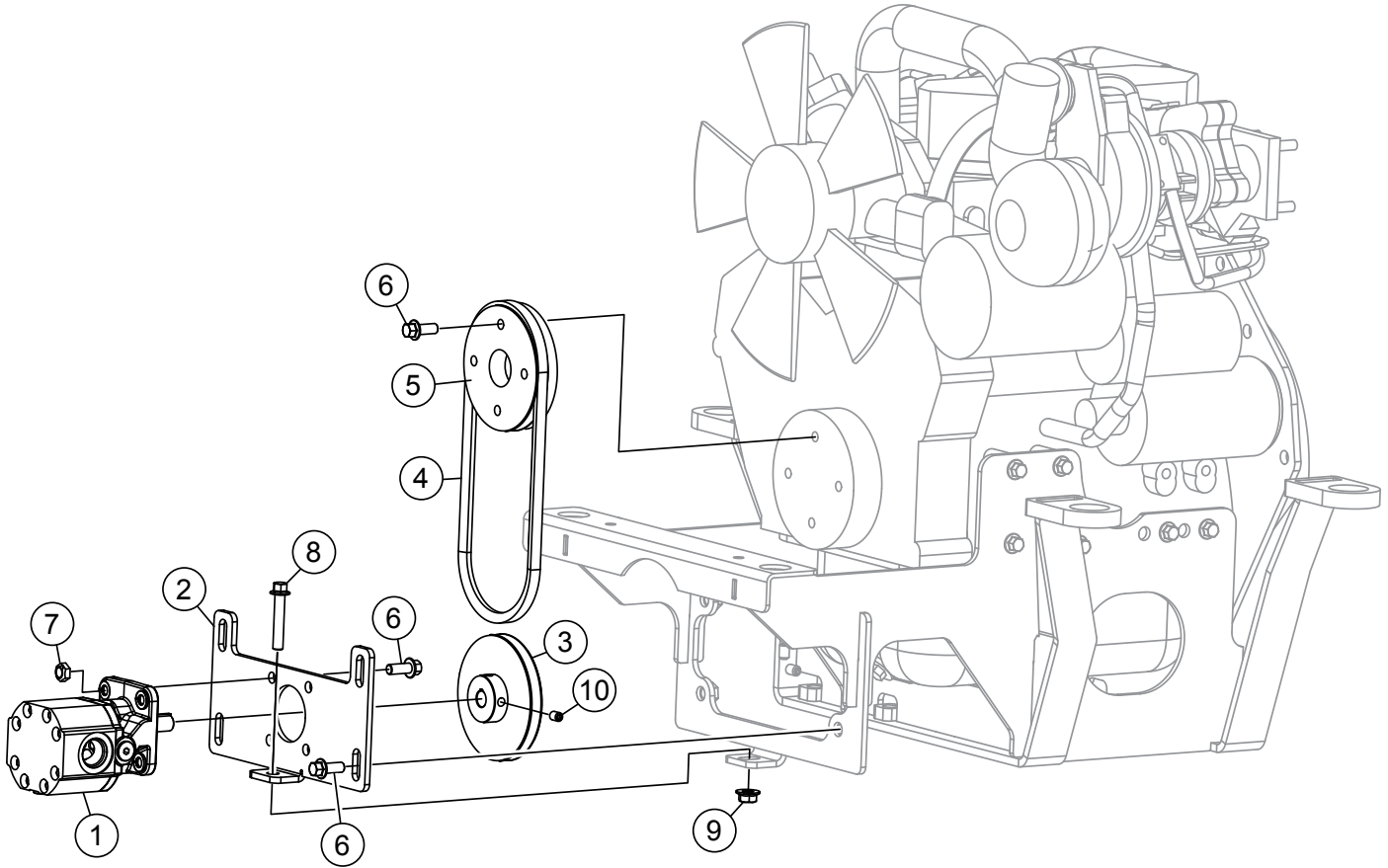
ENGINE MOUNT ASSY.



ENGINE MOUNT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23100	MOUNT, ENGINE	1	
2	9176	SCREW, HHF M12-1.75 X 80 GR10.9	4	
3	20743	WASHER, ISO SNUB KROFUND DYN 148099-18	4	
4	23201-2	ISOLATOR, ARMOR PLATED UNIVERSAL (RED)	4	
5	23333	PIN, RADIATOR	2	
6	23019	BUSHING, RUBBER RADIATOR MOUNT	2	
7	9161	NUT, HEX FLANGED M12-1.75 GR8	4	
8	22021	SCREW, HHFS M8-1.25X20MM TENSILOK PATCH	11	

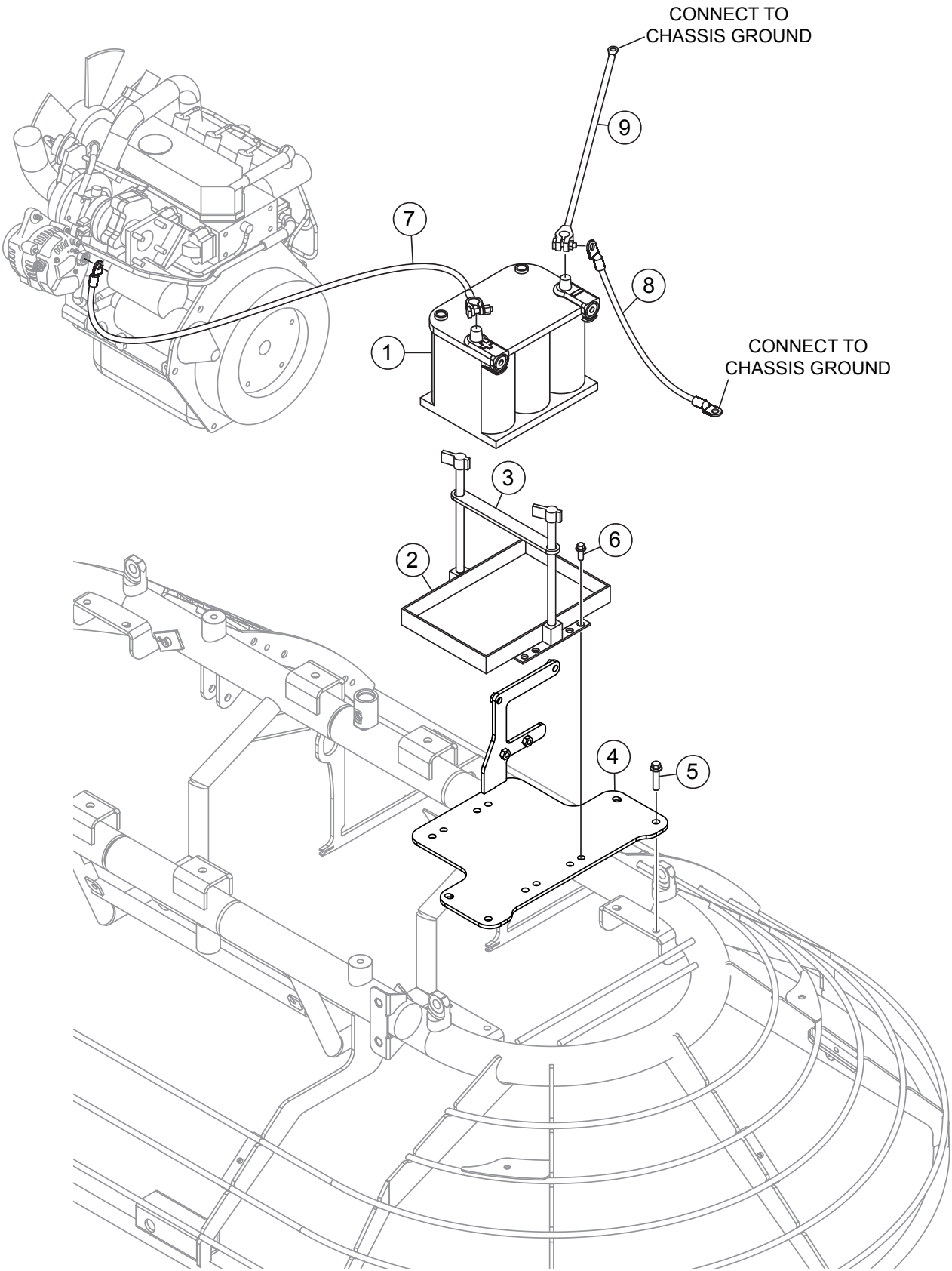
HYDRAULIC PUMP ASSY.



HYDRAULIC PUMP ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23304	PUMP, HYDRAULIC GEAR, 4 BOLT, 6GPM	1	
2	23357	PLATE, MOUNT HYDRAULIC PUMP, 4BOLT	1	
3	23324	PULLEY, HYDRAULIC PUMP DRIVEN	1	
4	16779-012	BELT, 3VX250	1	
5	23038	PULLEY, HYDRAULIC PUMP DRIVE	1	
6	22021	SCREW, HHFS M8-1.25X20MM TENSILOK PATCH	12	
7	20440	NUT, HEX LOCK M8-1.25 DEFORMED THIN	4	
8	9086	SCREW, HHFS M8-1.25X45MM PLATED	1	
9	15227	NUT, HEX FLANGED M8-1.25	1	
10	38052	SCREW, SHSCU M8-1.25 X 12 DIN916	2	

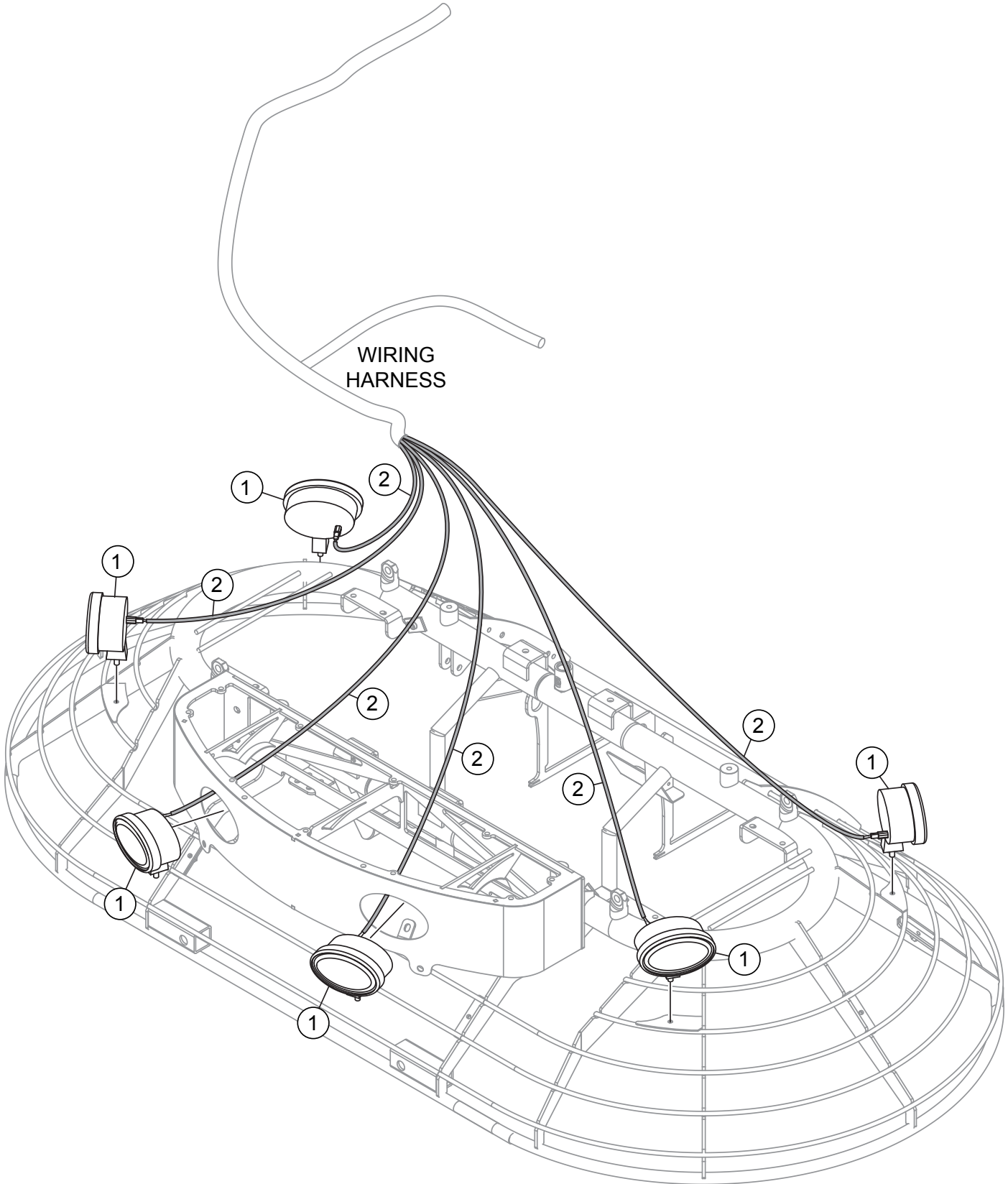
BATTERY ASSY.



BATTERY ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	404006	BATTERY, OPTIMA 8022-091	1	
2	29661	TRAY, BATTERY, ATTWOOD 9090-1	1	
3	23274	TIE DOWN BAR, BATTERY	1	
4	23356	PLATE, BATTERY	1	
5	22106	SCREW, HHFS 3/8-16 X 1.25 ZINC	4	
6	22021	SCREW, HHFS M8-1.25X20MM TENSILOK PATCH	4	
7	19303	CABLE, BATTERY POS 4GA X 48" POST	1	
8	1597	CABLE, BATTERY NEG 4GA X 16"	1	
9	12278	CABLE, BATTERY NEG POST4GA X 32 X 3/8RTL	1	

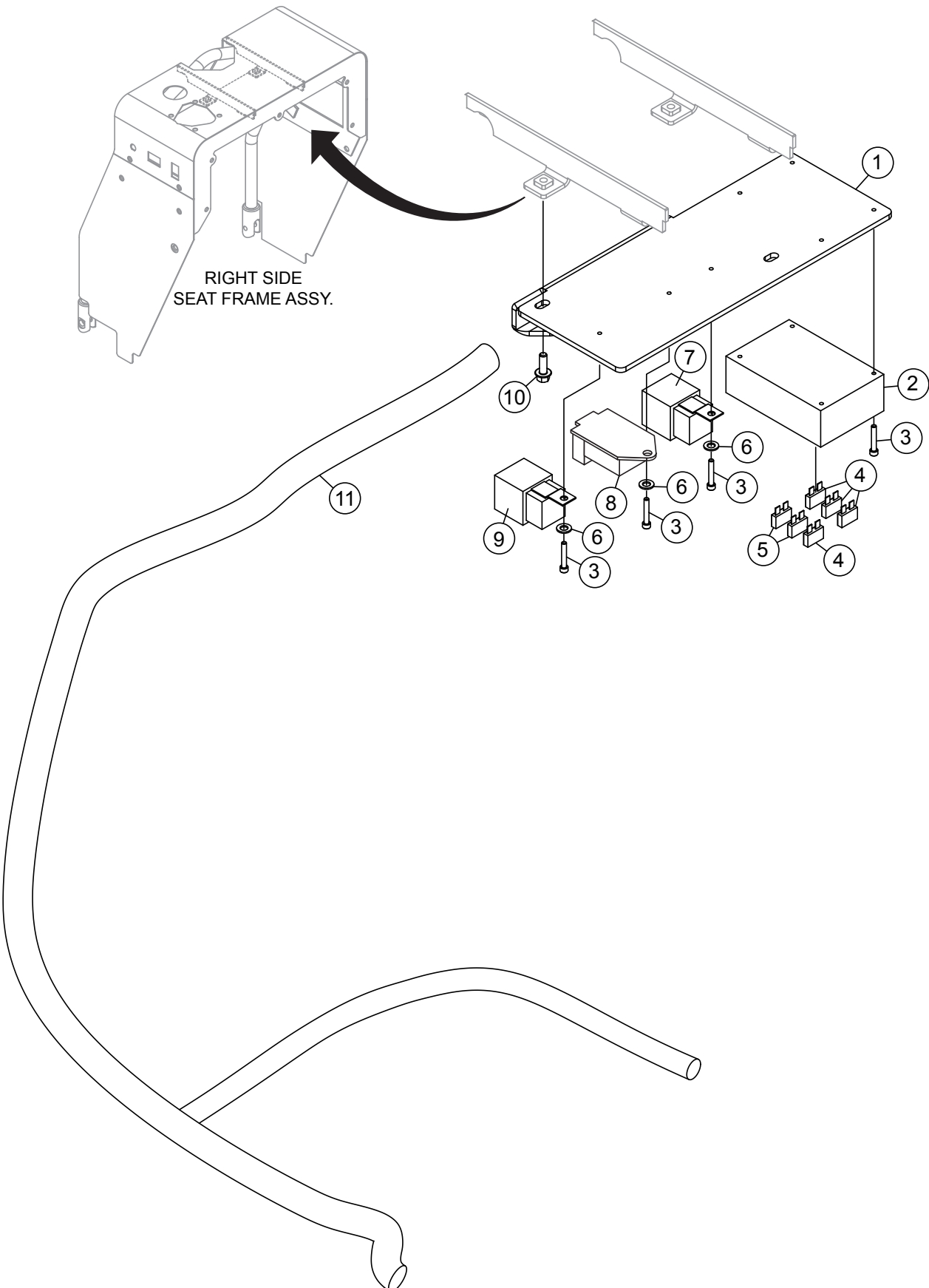
LIGHTS ASSY.



LIGHTS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	22347	LIGHT, HELLA 50W BOTTOM MOUNT #996361617	6	
2	23192	WIRE HARNESS, HELLA LIGHT	6	

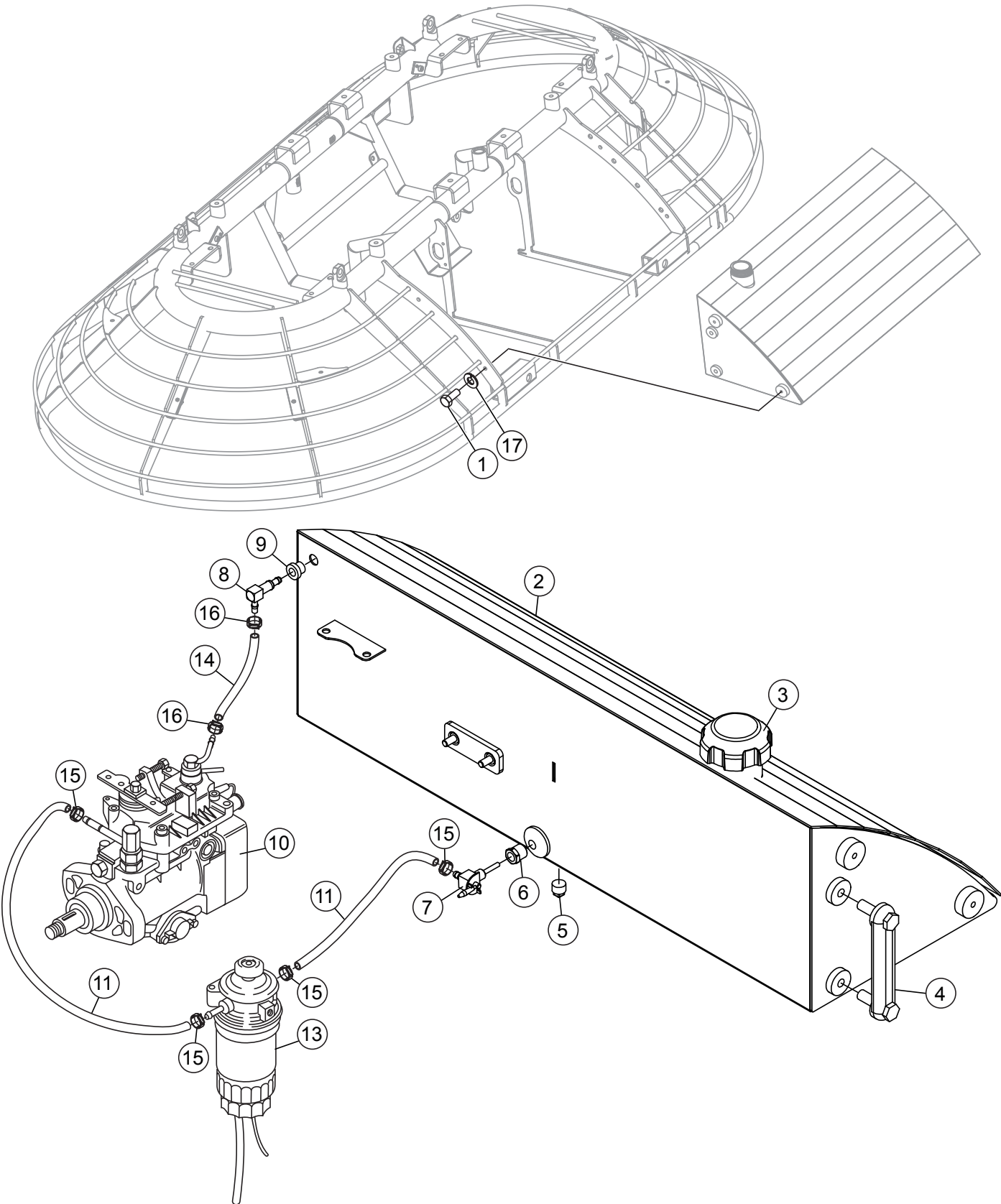
ELECTRICAL ASSY.



ELECTRICAL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23157	PLATE, FUSE MOUNT	1	
2	22426	BLOCK, TERMINAL FUSE	1	
3	923118	SCREW, SHC 8-32x1 NP	7	
4	23284-100	FUSE, 10 AMP ATC/ATO	4	FUSES 1,3,5,6
5	23284-300	FUSE, 30 AMP ATC/ATO	2	FUSES 2,4
6	2203	WASHER, FLAT, #10	3	
7	12017	RELAY, KILL # HELLA # 87411B	1	
8	2881087802	TIMER, GLOW PLUG	1	
9	2881087801	RELAY, GLOW PLUG	1	
10	49048	SCREW, HHFS 1/4-20 x 3/4 GR5	2	
11	23190	HARNESS, WIRE ENG/CNTL	1	

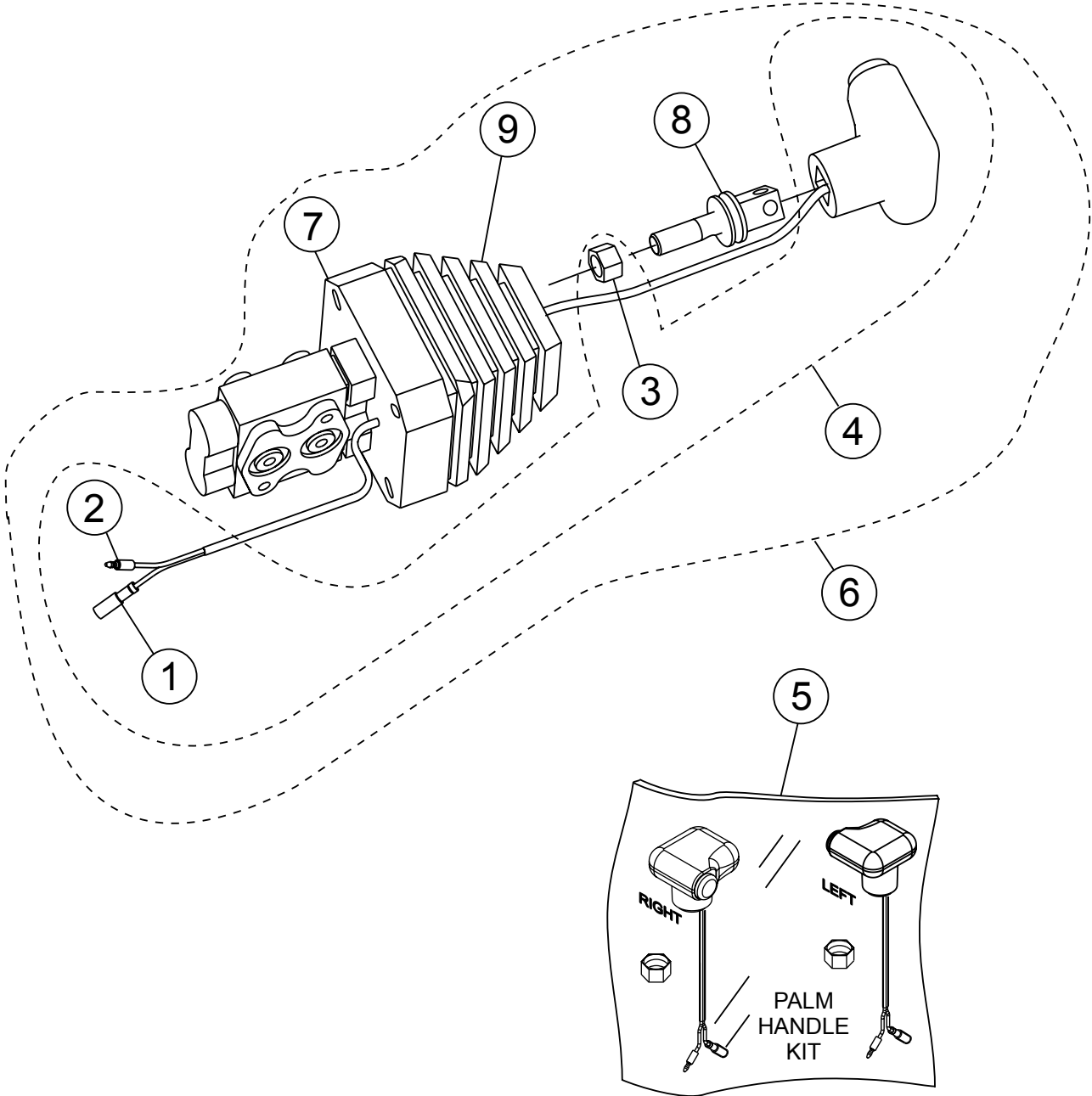
FUEL TANK ASSY.



FUEL TANK ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	2866	HHC M8-1.25 X 20MM	4	
2	23067	TANK W/A, HHX FUEL	1	
3	22205	RACHET CAP, TOP VENT	1	
4	3336	GAUGE, OIL TEMP/LEVEL	1	
5	911329	FITTING, PLUG 3/8MP MAGNET	1	
6	19317	FITTING, BRASS BUSHING 1/4FP x 3/8MP	1	
7	22076	SHUTOFF VALVE, 1/4 NPT X 5/16 HOSE	1	
8	12007	FITTING, 90° 4SBARBx6-4SBARB THRU TANK	1	
9	19633	BUSHING, RUBBER FUEL DAPCO 10672	1	
10	825518	INJECTION PUMP	1	
11	60028	HOSE, .321 D 50PSI LOW PERM	2	SOLD BY FOOT
13	23014-12	FILTER, FUEL	1	
14	60012	HOSE, .250 D 50PSI LOW PERM	1	
15	22068	CLAMP, STEPLESS EAR 5/16" HOSE	4	
16	22067	CLAMP, STEPLESS EAR 1/4" HOSE	2	
17	0161 C	WASHER, LOCK 5/16 MED	4	

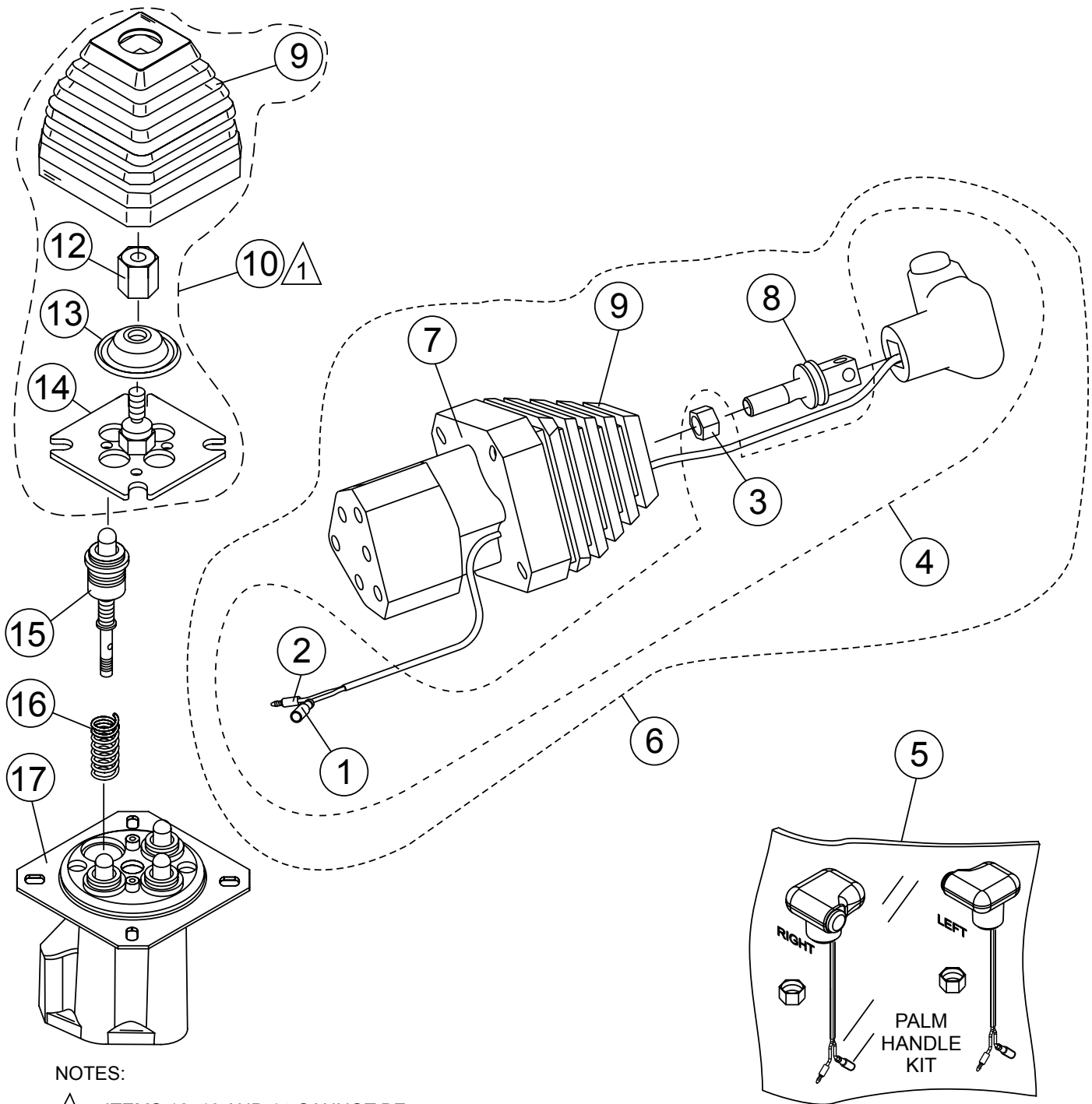
LEFT-HAND VALVE ASSY.



LEFT-HAND VALVE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1#@\$	1318	TERMINAL, BULLET, FEMALE, 18-22	1	
2#@\$	4692	TERMINAL, BULLET MALE 14-16	1	
3#@\$	16083	NUT, HEX M12 P1.75	1	
4@\$	20150	PALM HANDLE, W/SWITCH, LEFT	1.....	INCLUDES ITEMS W/#
5	20165	PALM HANDLE KIT, L/R HANDLES W/O BOOT.....	1.....	INCLUDES ITEMS W/\$
6	20831	VALVE ASSY. W/SWITCH	1.....	INCLUDES ITEMS W/@
7@	20833	VALVE, LH STEERING	1	
8@	21053	ADAPTOR, LH PALM HANDLE	1	
9@	21631	BOOT, STEERING VALVE	1	

RIGHT-HAND VALVE ASSY.



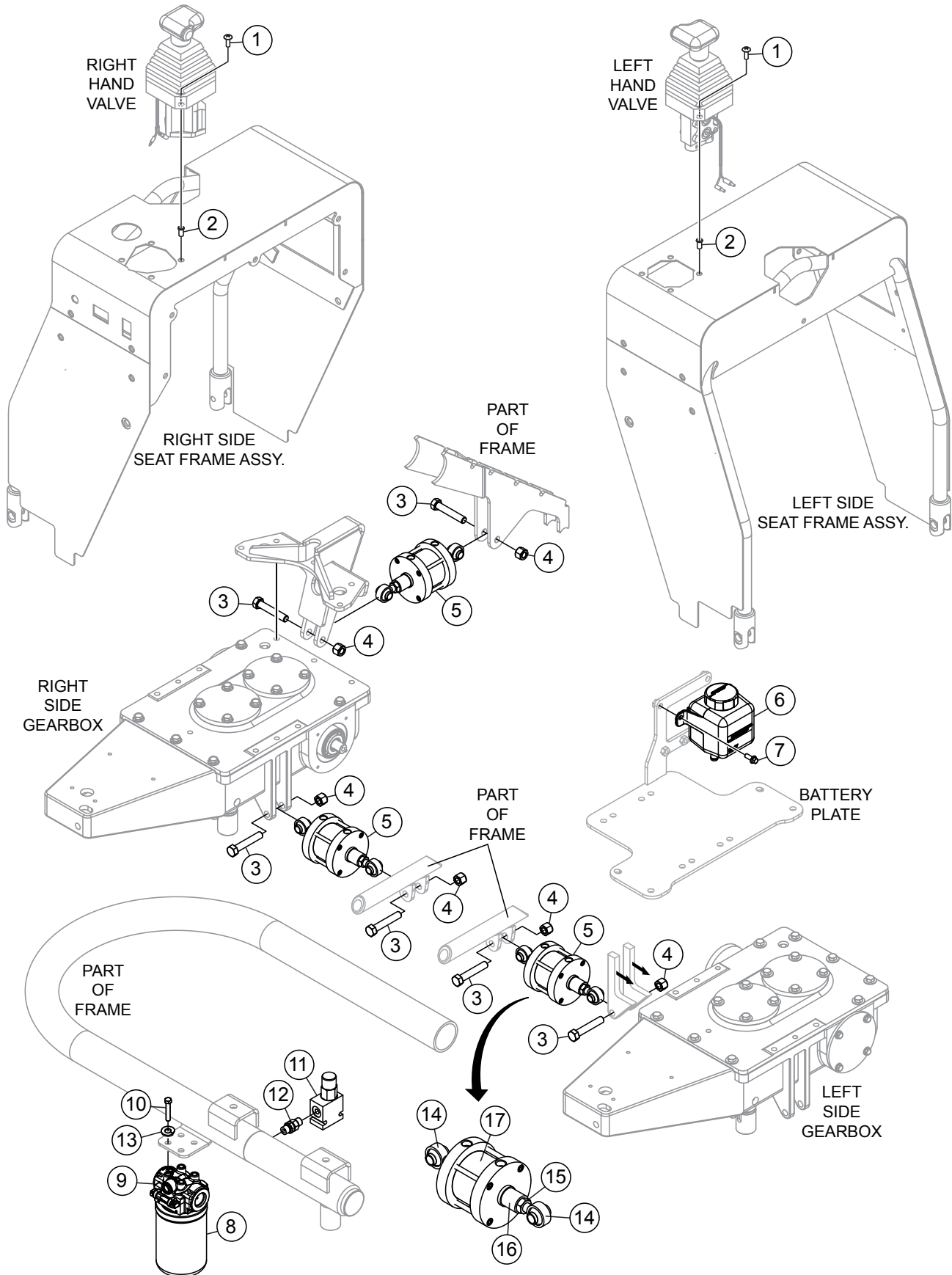
NOTES:

▲ ITEMS 12, 13 AND 14 CANNOT BE PURCHASED SEPARATELY.

RIGHT-HAND VALVE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1#@\$	1318	TERMINAL, BULLET, FEMALE, 18-22	1	
2#@\$	4692	TERMINAL, BULLET MALE 14-16	1	
3#@\$	16083	NUT, HEX M12 P1.75	1	
4@\$	20155	PALM HANDLE, W/SWITCH, RIGHT	1.....	INCLUDES ITEMS W/#
5	20165	PALM HANDLE KIT, L/R HANDLES W/O BOOT.....	1.....	INCLUDES ITEMS W/\$
6	20829	VALVE ASSY., W/SWITCH	1.....	INCLUCES ITEMS W/@
7@	20832	VALVE, RH STEERING	1	
8@	20834	ADAPTOR, RH PALM HANDLE	1	
9%@	21631	BOOT, STEERING VALVE	1	
10	432233013	GUIDE PLATE KIT.....	1.....	INCLUDES ITEMS W/%
11%		BOOT, STEERING VALVE	1	
12%		NUT	1	
13%		GUIDE PLATE BUSHING	1	
14%		UPPER GUIDE PLATE	1	
15	321800006	VALVE	4	
16	421801100	SPRING, RETURN	4	

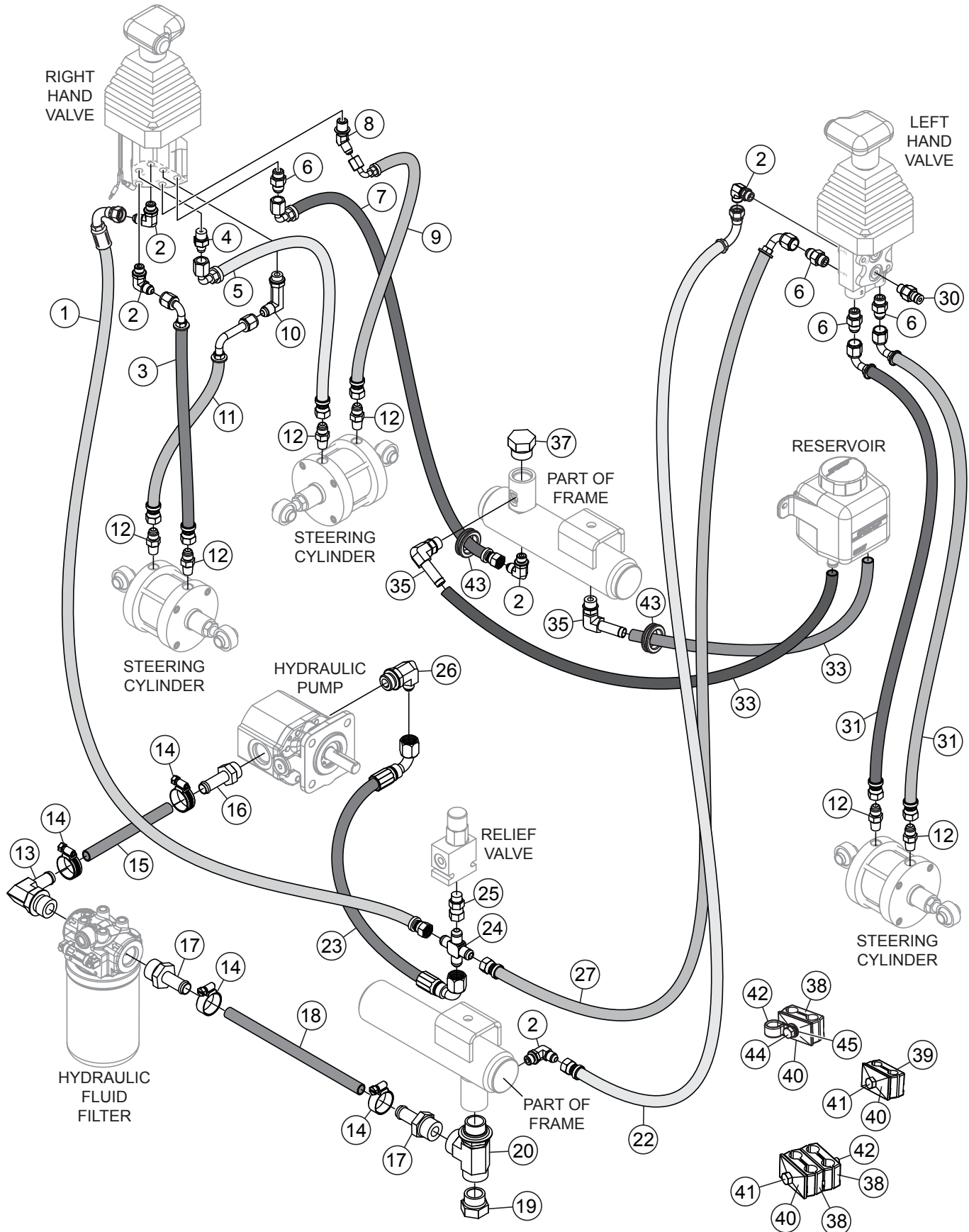
HYDRAULIC STEERING MOUNTING ASSY.



HYDRAULIC STEERING MOUNTING ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	12287	SCREW, THP 1/4-20 X 3/4 SS	8	
2	19266	NUT, BLIND 1/4-20 X 10GA	8	
3	12402	SCREW, HHC 1/2-13 X 2-1/2	6	
4	16629	NUT, NYLOC 1/2-13 GD 8	6	
5	23262	CYLINDER, HYDRAULIC STEERING ASSY	3	INCLUDES ITEMS W/@
6	37213	RESERVOIR, 350 ML, HYDROGEAR 71327	1	
7	22021	SCREW, HHFS M8-1.25x20MM TENSILOK PATCH	2	
8	23275-02	ELEMENT, 10 MICRON FILTER	1	
9	23275-04	HEAD, 4" FILTER W/ INDICATOR, 5PSI BYP	1	
10	4196	SCREW 3/8-16 X .75	4	
11	23034	VALVE, PILOT OPERATED RELIEF	1	
12	23265	COUPLING, 6MO-6MO	1	
13	0166 A	WASHER, LOCK 3/8MD	4	
14@	23260	ROD END, 1/2-20 M RH W/CUSTOM BALL	6	
15@	11146	NUT, HEX JAM 1/2-20 PLATED	6	
16@	23261	SPACER, HHX STEERING CYLINDER	3	
17@	12056	CYLINDER, 2.5" BORE X 1.5" STROKE X .75" ROD	3	

HYDRAULIC STEERING ASSY.



HYDRAULIC STEERING ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	23248-06	HOSE, 44.937" LP #6 6FJ ST - 6FJ 45	1	
2	11722	FITTING, 90 6MJ-6MO	5	
3	23251-03	HOSE, 47.562" LP #6 6FJ ST - 6FJ 90	1	
4	367470	FITTING, STR 4MJ - 6MO	1	
5	23251-04	HOSE, 58.750" LP #4 4FJ 90 - 4FJ ST	1	
6	11721	FITTING, STR 6MJ-6MO	4	
7	23248-07	HOSE, 61.625" LP #6 6FJ 90 - 6FJ ST	1	
8	23273	FITTING, 45 6MO-4MJ	1	
9	23251-05	HOSE, 60.00" LP #4 4FJ 90 - 4FJ ST	1	
10	23272	FITTING, XL90-6MO-6MJ	1	
11	23251-02	HOSE, 41.20" LP #6 6FJ ST - 6FJ 90	1	
12	11725	FITTING, STR 6MJ - 1/4MP	6	
13	23268	FITTING, 90 12MO-10BARB	1	
14	23119	CLAMP, HOSE WORM LINED S.S. 3/4" X 1-1/8	4	
15	23248-01	HOSE, BRADED SUCTION #10, 7"	1	
16	23269	FITTING, STR 10MO-10BARB	1	
17	23267	FITTING, STR 12MO-10BARB	2	
18	23248-02	HOSE, BRADED SUCTION 10.5"	1	
19	23271	FITTING, PLUG 12MO MAG	1	
20	23264	FITTING, TEE 12MO-12FO-12FO RUN	1	
22	23248-05	HOSE, 50.375" LP #6 6FP 90 - 6FJ ST	1	
23	23248-03	HOSE, 19.50" 6FJ 90 - 6FJ 90	1	
24	23270	FITTING, CROSS 6MJ-6MJ-6MJ-6MJ	1	
25	367601	FITTING, STR 6FJ - 6MO	1	
26	26791	FITTING, 90 6MJ - 10MO WMS DA	1	
27	23248-04	HOSE, 56.875" LP #6 6FJ ST - 6FJ 90	1	
30	12147	FITTING, QD 6MO DIAGN PARKER PD361	1	
31	23251-01	HOSE, 43.312" LP #6 6FJ ST - 6FJ 90	2	
33	23247-01	HOSE, LOW PRESSURE GPH-8	2	
35	23266	FITTING, 90 6MO-8BARB	2	
37	368657	FITTING, PLUG 12MO	1	
38	37421	5/8" CLAMP, BEHRINGER T2062-PP	6	
39	37420	1/2" CLAMP, BEHRINGER T2050-PP	2	
40	37424	COVER PLATE, BEHRINGER TCP-12	6	
41	2623	SCREW, HHC 5/16-18 X 1-1/4	4	
42	37423	STACK BOLT, BEHRINGER STB-T2	2	
43	13212	GROMMET, 1-1/4 ID	2	
44	0105	SCREW, HHC 5/16-18 X 1-1/2	2	
45	0300 B	WASHER, FLAT SAE 5/16	2	

TERMS AND CONDITIONS OF SALE — PARTS

PAYMENT TERMS

Terms of payment for parts are net 30 days.

FREIGHT POLICY

All parts orders will be shipped collect or prepaid with the charges added to the invoice. All shipments are F.O.B. point of origin. Multiquip's responsibility ceases when a signed manifest has been obtained from the carrier, and any claim for shortage or damage must be settled between the consignee and the carrier.

MINIMUM ORDER

The minimum charge for orders from Multiquip is \$15.00 net. Customers will be asked for instructions regarding handling of orders not meeting this requirement.

RETURNED GOODS POLICY

Return shipments will be accepted and credit will be allowed, subject to the following provisions:

1. A Returned Material Authorization must be approved by Multiquip prior to shipment.
2. To obtain a Return Material Authorization, a list must be provided to Multiquip Parts Sales that defines item numbers, quantities, and descriptions of the items to be returned.
 - a. The parts numbers and descriptions must match the current parts price list.
 - b. The list must be typed or computer generated.
 - c. The list must state the reason(s) for the return.
 - d. The list must reference the sales order(s) or invoice(s) under which the items were originally purchased.
 - e. The list must include the name and phone number of the person requesting the RMA.
3. A copy of the Return Material Authorization must accompany the return shipment.
4. Freight is at the sender's expense. All parts must be returned freight prepaid to Multiquip's designated receiving point.

5. Parts must be in new and resalable condition, in the original Multiquip package (if any), and with Multiquip part numbers clearly marked.
6. The following items are not returnable:
 - a. Obsolete parts. (If an item is in the price book and shows as being replaced by another item, it is obsolete.)
 - b. Any parts with a limited shelf life (such as gaskets, seals, "O" rings, and other rubber parts) that were purchased more than six months prior to the return date.
 - c. Any line item with an extended dealer net price of less than \$5.00.
 - d. Special order items.
 - e. Electrical components.
 - f. Paint, chemicals, and lubricants.
 - g. Decals and paper products.
 - h. Items purchased in kits.
7. The sender will be notified of any material received that is not acceptable.
8. Such material will be held for five working days from notification, pending instructions. If a reply is not received within five days, the material will be returned to the sender at his expense.
9. Credit on returned parts will be issued at dealer net price at time of the original purchase, less a 15% restocking charge.
10. In cases where an item is accepted, for which the original purchase document can not be determined, the price will be based on the list price that was effective twelve months prior to the RMA date.
11. Credit issued will be applied to future purchases only.

PRICING AND REBATES

Prices are subject to change without prior notice. Price changes are effective on a specific date and all orders received on or after that date will be billed at the revised price. Rebates for price declines and added charges for price increases will not be made for stock on hand at the time of any price change.

Multiquip reserves the right to quote and sell direct to Government agencies, and to Original Equipment Manufacturer accounts who use our products as integral parts of their own products.

SPECIAL EXPEDITING SERVICE

A \$35.00 surcharge will be added to the invoice for special handling including bus shipments, insured parcel post or in cases where Multiquip must personally deliver the parts to the carrier.

LIMITATIONS OF SELLER'S LIABILITY

Multiquip shall not be liable hereunder for damages in excess of the purchase price of the item with respect to which damages are claimed, and in no event shall Multiquip be liable for loss of profit or good will or for any other special, consequential or incidental damages.

LIMITATION OF WARRANTIES

No warranties, express or implied, are made in connection with the sale of parts or trade accessories nor as to any engine not manufactured by Multiquip. Such warranties made in connection with the sale of new, complete units are made exclusively by a statement of warranty packaged with such units, and Multiquip neither assumes nor authorizes any person to assume for it any other obligation or liability whatever in connection with the sale of its products. Apart from such written statement of warranty, there are no warranties, express, implied or statutory, which extend beyond the description of the products on the face hereof.

Effective: February 22, 2006

PARTS MANUAL

HERE'S HOW TO GET HELP

PLEASE HAVE THE MODEL AND SERIAL
NUMBER ON-HAND WHEN CALLING

UNITED STATES

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Carson, CA 90746
Contact: mq@multiquip.com

Tel. (800) 421-1244
Fax (310) 537-3927

Service Department

800-421-1244
310-537-3700

Fax: 310-537-4259

Technical Assistance

800-478-1244

Fax: 310-943-2238

MQ Parts Department

800-427-1244
310-537-3700

Fax: 800-672-7877
Fax: 310-637-3284

Warranty Department

800-421-1244
310-537-3700

Fax: 310-943-2249

MEXICO

MQ Cipsa

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Momoxpan, Cholula, Puebla 72760 Mexico
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Fax: 0161 339 3226

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